



NIT No.: TPNODL/OT/2021-22/065 Dtd.06.09.21

TENDER NOTIFICATION

for

Rate Contract for Supply of Isolator & AB switch for 11KV & 33KV

Tender Enquiry No.: TPNODL/OT/2021-22/065;

Due Date for Bid Submission: 20.09.2019, 16:00 Hrs

**TP NORTHERN ODISHA DISTRIBUTION LIMITED
(A TATA Power and Odisha Government Joint Venture)
Contracts & Material Management Department,
Corporate Office, Januganj, Balasore-756019**

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1.0 Event Information

1.1 Scope of work

Open Tenders are invited in E-Tender Bidding Process from interested Bidders for entering into a rate contract valid for 18 Months as defined below:

| S.No. | Description | EMD | Tender Fee | RC Validity |
|-------|--|--------------|------------|-------------|
| 1 | Rate Contract for supply of Isolator & AB switch for 11KV & 33KV (Including packing, loading, transportation, transit insurance, unloading at TPNODL site/store) | Rs. 2,00,000 | Rs.5,000 | 18 months |

1.2 Availability of Tender Documents

Procedure to participate in tender:

Following steps to be done before “Last date and time for Payment of Tender Fee” as mentioned:

1. Any pre-bid query regarding the tender shall be sent through mail to supriya.panigrahi@tpnodl.com with copy to vipin.Chauhan@tpnodl.com before last date and time for Pre-bid query submission in TPNODL Pre-bid query format.
2. The response to the queries will be provided in www.tpnodl.com against the corresponding tender.
3. Eligible and Interested Bidders to submit duly signed and stamped letter on Bidder's letter head indicating
 - a. Tender Enquiry number
 - b. Name of authorized person
 - c. Contact number
 - d. E-mail id
 - e. Details of submission of Tender Fee
 - f. GST Registration No
 - g. Payment UTR No- Having Remark (Bidder Name_NIT Number)
 - h. ANID & User ID of ARIBA System(If Any)

Non-Refundable Tender Fee, as indicated in table above, to be submitted in the form of Direct Deposit in the following bank account and submit the receipt along with a covering letter clearly indicating the Tender Reference/ Enquiry Number –

Beneficiary Name – TP Northern Odisha Distribution Limited
Bank Name – Union Bank of India
Branch Name – Balasore Branch
Account No – 500601010280332
IFSC Code – UBIN0550060

E-mail with necessary attachment to be sent to supriya.panigrahi@tpnodl.com with copy to vipin.Chauhan@tpnodl.com before last date and time for payment of Tender Fee.

Interested bidders to submit Tender Fee and Authorization Letter before Last date and time as indicated in the event calendar, after which link from TPNODL E-Tender system (Ariba) will be shared for further communication and bid submission.

Please note all future correspondence regarding the tender, bid submission, bid submission date extension etc will happen only through TPNODL E-Tender system (Ariba). User manual to guide the bidders to submit the bid through E-Tender system (Ariba) is also enclosed.

No e-mail or verbal correspondence will be responded. All communication will be done strictly with the bidders who have done the above step to participate in the Tender.

Also it may be strictly noted that once date of “Last date and time for Payment of Tender Participation Fee” is lapsed no Bidder will be sent link from TPNODL E-Tender System (Ariba). Without this link vendor will not be able to participate in the tender. Any last moment request to participate in tender will not be entertained.

Any payment of Tender Fee / EMD by Bidder who have not done the prerequisite will not be refunded.

Also all future corrigendum to the said tender will be informed on Tender section on website <https://www.tpnodl.com>

1.3 Calendar of Events

| | | |
|-----|---|---|
| (a) | Date of sale of detailed bid documents/ hosting of detailed bid documents in TPNODL website | From 06.09.2021 to 18.09.2021 from 11:00 Hrs. to 15:00 Hrs on working days. |
| (b) | Last Date of receipt of pre-bid queries, if any | 10.09.2021 up to 16:00 Hours |
| (c) | Last Date of Posting Consolidated | 15.09.2021 up to 17:00 Hours |

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| | | |
|-----|---|--|
| | replies to all the pre-bid queries as received | |
| (d) | Last date and time of receipt of Tender fees | 18.09.2021 up to 17:00 Hours |
| (d) | Last date and time of receipt of Bids | 20.09.2021 up to 16:00 Hours |
| (e) | Date & Time of opening technical bids & EMD | 20.09.2021 at 16:30 Hours |
| (f) | Date & Time of opening of Price of qualified bids | Will be notified to the successful bidders through our website / mail. |

Note :-In the event of last date specified for submission of bids and date of opening of bids is declared as a closed holiday for TPNODL office, the last date of submission of bids and date of opening of bids will be the following working day at appointed times.

1.4 Mandatory documents required along with the Bid.

1. EMD of requisite value as mentioned above.
2. Tender fee (RTGS/NEFT) in case tender is downloaded from website
3. Duly signed copy of TENDER as an acceptance to all terms and conditions as mentioned in this TENDER.
4. Balance sheet as mentioned in Qualification Criteria
5. Work executed details as per Qualification Requirement along with supporting documents
6. Drawing, Type Test details and copies if required
7. Commercial specification details as per attached sheet
8. Schedule of Deviations as per attached sheet
9. Proper authorization letter to sign the tender on the behalf of bidder shall accompany the bid.

In absence of any of the above documents bid is liable to be rejected.

1.5 Deviation from Tender

Bidder shall necessarily submit a signed and stamped copy of this TENDER (in original) as a token of acceptance of all the terms and conditions of this TENDER. Replication of this TENDER on bidders' document shall not be acceptable. Normally no deviation is accepted to TENDER document supplied with the bid & bid with deviation is liable to be rejected. However, in case of any deviations to this TENDER, all such deviations shall be furnished by the bidders in the schedule of Deviations attached as Annexure III and submit the same as a part of the Technical Bid.

1.6 Right of Acceptance/Rejection

Bids would be rejected in absence of following documents:-

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1. EMD of requisite value
2. Tender fee of requisite value
3. The offer does not contain prices indicating break up towards all taxes & duties
4. Complete technical details are not enclosed
5. Tender is received after due date and time
6. Tender is not received as per terms and conditions of tender

TPNODL reserves the right to accept/reject any or all the bids without assigning any reason thereof. Joint venture bids are not allowed.

1.7 Qualification Criteria

Bidder should the following minimum qualifications to submit a Proposal:

- a) The bidder should have an average annual turnover of Rs. 5 crores in last 3 financial years. Copy of audited P&L Account to be submitted in this regard.
- b) The bidder should have supplied at least 100 Sets of 11Kv & 33kV or higher voltage rating of Isolators during last three years. Copy of work order / completion certificate to be submitted in this regard.
- c) The bidder should have performance certificates for 1 year satisfactory performance from at least two reputed companies for similar or higher voltage rating of similar works. The work against these issued certificates should be completed in last seven years from the date of bid submission. In case the bidder has a previous association with TPNODL/CODL/SODL/WODL for similar products and services, the performance feedback for that bidder by TPNODL/TPCODL/TPSODL/TPWODL's User Group shall only be considered irrespective of performance certificates issued by any third organization.
- d) The bidder should have its own manufacturing facility to manufacture Isolators of 11Kv & 33kV or higher ratings. Bidder must submit undertaking in this regard.
- e) Bidder should have the In-house testing facilities for acceptance test as per TPNODL specifications. Bidder must submit undertaking in this regard.

TPNODL reserve the right to conduct Factory visit of new/existing bidder to access their capabilities & capacity, to successfully execute the work covered under the scope of work within stipulated completion period. This assessment shall inter-alia include document verification, manufacturing facilities visit, manufacturing/repairing capacity, details of plant & machinery, manufacturing and testing facilities, manpower and financial resources, details of quality systems, past experiences and performance. Decision of TPNODL shall be binding on all bidders.

1.8 Marketing integrity

We have a fair and competitive marketplace. The rules for bidders are outlined in the General Condition of Contracts. Bidders must agree to these rules prior to participating. In addition to other remedies available, we reserve the right to exclude a bidder from

participating in future markets due to the bidder's violation of any of the rules or obligations contained in the General Condition of Contracts. A bidder who violates the market place rules or engages in behaviour that disrupts the fair execution of the marketplace restricts a bidder to length of time, depending upon the seriousness of the violation. Examples of violations include, but are not limited to:

1. Failure to honour prices submitted to the marketplace
2. Breach of terms of the published in TENDER/NIT

1.9 Supplier Confidentiality

All information contained in this tender is confidential and shall not be disclosed, published or advertised in any manner without written authorization from TPNODL. This includes all bidding all bidding information submitted.

All tender documents remain the property of TPNODL and all suppliers are required to return these documents to TPNODL upon request.

Suppliers who do not honour these confidentiality provisions will be excluded from participating in future bidding events.

2.0 Evaluation Criteria

- The bids will be evaluated technically on the compliance to tender terms and conditions.
- The bids will be evaluated commercially on the overall all-inclusive lowest cost of each Lot as calculated in Schedule of Items [Annexure I]. TPNODL however, reserves the right to split the order line item wise and / or quantity wise, among more than one Bidder. Hence all bidders are advised to quote their most competitive rates.
- Bidder has to mandatorily quote as per Schedule of Items [Annexure-I]. Failing to do so TPNODL may reject the bid.

NOTE: In case of a new bidder not registered, existing sites shall be visited by TPNODL officials for confirming overall performance of the BA. However TPNODL reserves the right to carry out sites inspection and evaluation for any bidder prior to technical qualification. In case a bidder is found as Disqualified in the sites visit evaluation, their bid shall not be evaluated any further and shall be summarily rejected. The decision of TPNODL shall be final and binding on the bidder in this regard.

2.1 Price Variation Clause: The year wise prices as finalized shall remain firm during the entire contract period.

3.0 Submission of Bid Documents

3.1 Bid Submission

Bidders are requested to submit their offer in line with this Tender document. TPNODL shall respond to the clarification raised by various bidders and the replies will be sent to all participating bidders through Email/website/Online Ariba.

“EMD” of Rs 2,00,000/- (Rupees Two Lakh Only) valid for 210 days from the due date of bid submission in the form of BG favoring TPNODL in the format as mentioned in General Condition of Contract. Soft copy should be uploaded in the EMD folder and hard copy should be submitted to TPNODL before due date. **In case Bidder submitting DD, same shall be submitted through NEFT/RTGS only.** E-payment details as mentioned above.

TPNODL Bank Details for transferring Tender Fee and EMD is as below:

Beneficiary Name – TP Northern Odisha Distribution Limited
Bank Name – Union Bank of India
Branch Name – Balasore Branch
Account No – 500601010280332
IFSC Code – UBIN0550060

*In case the EMD is in the form of BG, **EMD Original Hard Copy** shall be delivered at the following address in Envelope clearly indicating Tender Reference Number, Name of Tender and Bidder Name before opening of the Bid.*

The Envelop shall be addresses to:

H.O.D. (Contracts)
TP NORTHERN ODISHA DISTRIBUTION LIMITED
(A Tata Power and Odisha Government Joint Venture)
Corporate office: Januganj, Balasore, Odisha-756019

The envelop shall also bear the Name & Address of the bidder along with our Tender No. and subject.

“TECHNICAL BID” should be uploaded in the assigned folder of Technical Bid and shall contain the following:

SECOND PART: “TECHNICAL BID” shall contain the following documents:

- a) Documentary evidence in support of qualifying criteria
- b) Technical literature/GTP/Type test report etc. (if applicable)
- c) Qualified manpower available
- d) Testing facilities (if applicable)
- e) No Deviation Certificate as per the Annexure III – Schedule of Deviations
- f) Acceptance to Commercial Terms and Conditions viz Delivery schedule/ Contract period, payment terms etc. as per the Annexure IV – Schedule of Commercial Specifications.
- g) Quality Assurance Plan/Inspection Test Plan for supply items (if applicable) h) Acceptance of Annexure II-Scope of work and service level agreement.

The technical bid shall be properly indexed and is to be submitted through TPNODL E-tender platform (Ariba) only. Hard copy of Technical Bids need not be submitted.

THIRD PART: "PRICE BID" shall contain only the price details and strictly in format as mentioned in Annexure I along with explicit break up of basic prices, Taxes & duties, Freight etc. In case any discrepancy is observed between the item description stated in Schedule of Items mentioned in the tender and the price bid submitted by the bidder, the item description as mentioned in the tender document (to the extent modified through Corrigendum issued if any) shall prevail. Price Bid is to be submitted in soft copy through TPNODL E-Tendering system (Ariba) only. Hard copy of Price Bid not be submitted.

SIGNING OF BID

The bid must contain the name, residence and place of business of the person or persons making the bid and must be signed and sealed by the Bidder with his usual signature. The names of all persons signing should also be typed or printed below the signature.

The Bid being submitted must be signed by a person holding a Power of Attorney authorizing him to do so, certified copies of which shall be enclosed.

The Bid submitted on behalf of companies registered with the Indian Companies Act, for the time being in force, shall be signed by persons duly authorized to submit the Bid on behalf of the Company and shall be accompanied by certified true copies of the resolutions, extracts of Articles of Association, special or general Power of Attorney etc. to show clearly the title, authority and designation of persons signing the Bid on behalf of the Company. Satisfactory evidence of authority of the person signing on behalf of the Bidder shall be furnished with the bid.

A bid by a person who affixes to his signature the word 'President', 'Managing Director', 'Secretary', 'Agent' or other designation without disclosing his principal will be rejected.

The Bidder's name stated on the Proposal shall be the exact legal name of the firm.

3.2 Contact Information

All the bidders are requested to send their pre-bid queries (if any) against this tender through e-mail within the stipulated timelines. The consolidated reply to all the queries received shall be posted on TPNODL website by the stipulated timelines as detailed in calendar of events.

Communication Details:

Package Owner - Contracts

Name: Ms. Supriya Panigrahi

Contact No.: 8895590483

E-Mail ID: supriya.panigrahi@tpnodl.com

HOD Contracts

Name: Mr. Vipin Chauhan

Contact No: 9717393121

E-Mail ID: vipin.chauhan@tpnodl.com

3.3 Bid Prices

Bidders can quote for the entire Scope of Supply/ work or specific line items with a break up of prices for individual items and Taxes & duties. The total bid price shall also cover all the supplier's mentioned in or obligations mentioned in or reasonably to be inferred from the bidding documents in respect of Design, Supply, Transportation to site, all in accordance with the requirement of bidding documents. The bidder shall complete the appropriate Price Schedules included herein, stating the Unit Price for each item & total price with taxes, duties & freight up to destination at various sites of TPNODL.

The prices offered shall be inclusive of all costs as well as Duties, Taxes and Levies paid or payable during the execution of the supply work, breakup of price constituents.

Applicable GST to be specified clearly.

The quantity break up shown else-where in Price Schedule is tentative. The bidder shall ascertain himself regarding material required for completeness of the entire work. Any items not indicated but are required to complete the job, shall be deemed to be included in prices quoted.

The rate contract shall be valid for a period of 18 Months.

3.4 Bid Currencies

Prices shall be quoted in Indian Rupees Only.

3.5 Period of Validity of Bids

Bids shall remain valid for 180 days from the due date of submission of the bid.

Notwithstanding clause above, the TPNODL may solicit the Bidder's consent to an extension of the Period of Bid Validity. The request and responses thereto shall be made in writing.

3.6 Alternative Bids

Bidders shall submit Bids, which comply with the Bidding documents. Alternative bids will not be considered. The attention of Bidders is drawn to the provisions regarding the rejection of Bids in the terms and conditions, which are not substantially responsive to the requirements of the bidding documents.

3.7 Modifications and Withdrawal of Bids

The bidder is allowed to modify or withdraw its bid till the due date of tender.

3.8 Earnest Money Deposit (EMD)

The bidder shall furnish, as part of its bid, an EMD amounting as specified in the tender.

The EMD is required to protect the TPNODL against the risk of bidder's conduct which would warrant forfeiture.

The EMD shall be denominated in any of the following form:

- a) Banker's Cheque /NEFT/RTGS in favor of TPNODL, payable at Balasore.
- b) Bank Guarantee valid for 210 days after due date of submission.

The EMD shall be forfeited in case of:

- a) The bidder withdraws its bid during the period of specified bid validity
- Or
- b) The case of a successful bidder, if the Bidder does not
 - i) accept the purchase order, or
 - ii) Furnish the required performance security BG.

3.9 Type Tests

The type tests specified in TPNODL specifications should have been carried out within five years prior to the date of bidding and test reports are to be submitted along with the bids. If type tests carried out are not within the five years prior to the date of bidding, the bidder will arrange to carry out type tests specified, at his cost.

4 Bid Opening & Evaluation process

4.1 Process to be confidential

Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process. Any effort by a Bidder to influence the TPNODL processing of Bids or award decisions may result in the rejection of the Bidder's Bid

4.2 Technical bid opening

Bids shall be opened as per the schedule mentioned in Calendar of Events. In case of limited tenders, the bids shall be opened internally by TPNODL. Owing to COVID Scenario, in case of Open Tenders also, the bids shall be opened internally by TPNODL. Technical bid must not contain any cost information whatsoever.

First the "EMD" will be checked. Bids without EMD/ cost of tender (if applicable) of required amount/ validity in prescribed format, shall be rejected.

Next, the technical bid of the bidders who have furnished the requisite EMD will be opened, one by one. The salient particulars of the techno commercial bid will be read out at the sole discretion of TPNODL.

4.3 Preliminary Examination of Bids/Responsiveness

TPNODL will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the Bids are generally in order. TPNODL may ask for submission of original documents in order to verify the documents submitted in support of qualification criteria.

Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price per item that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price per item will be corrected. If there is a discrepancy between the Total Amount and the sum of the total price per item, the sum of the total price per item shall prevail and the Total Amount will be corrected.

Prior to the detailed evaluation, TPNODL will determine the substantial responsiveness of each Bid to the Bidding Documents including production capability and acceptable quality of the Goods offered. A substantially responsive Bid is one, which conforms to all the terms and conditions of the Bidding Documents without material deviation.

Bid determined as not substantially responsive will be rejected by the TPNODL and/or the TPNODL and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

4.4 Techno Commercial Clarifications

After scrutiny of qualifying criteria, techno commercial criteria offered by the bidder, clarifications will be sought from the bidders for any deviations with respect to the TPNODL specifications and attempt will be made to bring all bids on a common footing. After all techno commercial issues are clarified, the date of price bid opening will be intimated to the technically accepted bidders and same shall also be notified at TPNODL website.

4.5 Clarification Of bids

To assist in the examination, evaluation and comparison of Bids, the TPNODL may, at its discretion, ask the Bidder for a clarification of its Bid. All responses to requests for clarification shall be in writing and no change in the price or substance of the Bid shall be sought, offered or permitted.

4.6 Price Bid Opening

Price bids will be opened at the stipulated date and time. The EMD of the bidder withdrawing or substantially altering his offer at any stage after the technical bid opening will be forfeited at the sole discretion of TPNODL without any further correspondence in this regard.

4.7 Reverse Auctions

TPNODL reserves the right to conduct the reverse auction (instead of public opening of price bids) for the products / services being asked for in the tender and reserves the rights to conduct the manual negotiation with the BA who is declared L1 after Reverse Auction. The terms and conditions for such reverse auction events shall be as per the Acceptance Form attached as Annexure VI of this document. The bidders along with the tender document shall mandatorily submit a duly signed copy of the Acceptance Form attached as Annexure VI as a token of acceptance for the same.

5 Award Decision

TPNODL will award the contract to the successful bidder whose bid has been determined to be the lowest-evaluated responsive bid as per the Evaluation Criterion mentioned at Clause 2.0. The Cost for the said calculation shall be taken as the all-inclusive cost quoted by bidder in Annexure I (Schedule of Items) subject to any corrections required in line with Clause 4.3 above. The decision to place award of contract order/LOI solely depends on TPNODL on the cost competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that TPNODL may deem relevant.

TPNODL reserves all the rights to award the contract to one or more bidders so as to meet the requirement or nullify the award decision without assigning any reason thereof.

In case any BAs is found unsatisfactory during the Contract period, the award will be cancelled and TPNODL reserves the right to award other BAs who are found fit.

6 Order of Preference/Contradiction :

In case of contradiction in any part of various documents in tender following shall prevail in order of preference

1. Schedule of Items (Annexure I)
2. Post Award Contract Administration (Clause 7.0)
3. Submission of Bid Documents (Clause 3.0)
4. Scope of Work and SLA (Annexure VII)-If any
5. Technical Specifications (Annexure II)
6. Inspection Test Plan (Annexure VIII)-If any
7. Acceptance Form for Participation in Reverse Auction (Annexure VI)
8. General Conditions of Contract (Annexure IX)

7 Post Award Contract Administration

7.1 Special Conditions of Contract

- TPNODL appreciates and welcomes the engagement/employment of persons from SC/ST community or any other deprived section of society by their BAs.
- Any change in statutory taxes, duties and levies during the contract period shall be borne by TPNODL. However in case of delay in work execution owing to reasons not attributable to

TPNODL, any increase in total liability shall be passed on the Bidder, whereas any benefits arising owing to such statutory variation in taxes and duties shall be passed on TPNODL.

- Rate Contract with 18 months validity shall be placed. Subsequently, Release orders shall be issued by TPNODL stores/site as and when required.
- The total time for completion of delivery at TPNODL Stores/site shall be 90 days from the date of receipt of release order by the BA or GTP drawing approval whichever is later.
- Within 15 days from the date of issue of contract to BA, BA shall submit SPBG equivalent to 5% of the contract value which shall be valid till warranty period plus one month.
- After the expiry of RC validity, BA shall have to submit SPBG. However, the BA has the option to re-submit the SPBG as per actual RO (Release Order) value issued against the RC, valid for Guarantee Period plus one month. The Guarantee Period shall be considered as per the last RO issued against the said RC. The original SPBG as submitted against the RC shall be released on submission of the new SPBG to TPNODL. Alternatively, BA may extend the validity of original SPBG only till the requisite period, i.e. guarantee Period plus one month.
- TPNODL will make 100% payment within 30 days of submission of the Bill/Invoice.
- All the terms and conditions of TPNODL GCC- Supply shall be applicable.

7.1 Drawing Submission & Approval

Bidder shall submit the GTP & Drawing to TPNODL within 7 days from the issuance of RC/PO for approval. TPNODL shall approve or shall provide its comments (as applicable) on the same within next 7 days. In case resubmission is required, same shall be completed by the bidder within next 4 days. The timelines for approval by TPNODL shall be 4 days in case of every resubmission. However, repetitive submissions are not desirable. In case the drawing and GTP approval process goes beyond 15 days from the date of RC issuance, and in the meantime a Release Order is issued by TPNODL, the time period beyond these 15 days shall be accounted within the delivery period of RO itself.

7.2 Completion Period

Rate Contract for supply of "Isolator & AB switch for 11KV & 33KV" shall be placed. Validity of Rate Contract shall be 18 months from the date of release of RC.

Various Release Order for supply as per TPNODL system requirements shall be issued against Rate Contract.

Material shall be delivered within 90 days of Release Order placement / manufacturing clearance whichever is later.

The TPNODL reserve the right to depute their representative for inspection before dispatch. An advance written notice of two weeks for proposed inspection date/readiness of material shall be given to enable TPNODL to depute their representative for inspection OR ask for submission of test reports for approval before dispatch. No material shall be dispatch without written Material Dispatch Clearance Certificate (MDCC).

7.4 Guarantee Period

As per technical specification. Guarantee period shall be started from date of receipt of material at site in good condition.

7.5 Payment Terms

As per GCC - Supply attached with this tender document..

7.6 Climate Change

Significant quantities of waste are generated during the execution of project and an integrated approach for effective handling, storage, transportation and disposal of the same shall be adopted. This would ensure the minimization of environmental and social impact in order to combat the climate change.

7.7 Ethics

- TPNODL is an ethical organization and as a policy TPNODL lays emphasis on ethical practices across its entire domain. Bidder should ensure that they should abide by all the ethical norms and in no form either directly or indirectly be involved in unethical practice.
- TPNODL work practices are governed by the Tata Code of Conduct which emphasizes on the following:
 - We shall select our suppliers and service providers fairly and transparently.
 - We seek to work with suppliers and service providers who can demonstrate that they share similar values. We expect them to adopt ethical standards comparable to our own.
 - Our suppliers and service providers shall represent our company only with duly authorized written permission from our company. They are expected to abide by the Code in their interactions with, and on behalf of us, including respecting the confidentiality of information shared with them.
 - We shall ensure that any gifts or hospitality received from, or given to, our suppliers or service providers comply with our company's gifts and hospitality policy.
 - We respect our obligations on the use of third party intellectual property and data.

Bidder is advised to refer GCC attached at Annexure IX for more information.

Any ethical concerns with respect to this tender can be reported to the following e-mail ID: ceooffice@tpnodl.com

8 Specification and standards

The items supplied should conform to the standards and specifications of TPNODL specification as Annexure VI, unless otherwise specified in this tender.

9 General Condition of Contract

Any condition not mentioned above shall be applicable as per GCC-Supply attached along with this tender.

10 Safety

Safety related requirements as mentioned in our safety Manual put in the Company's website which can be accessed by: [http:// www.tpnodl.com](http://www.tpnodl.com)

All Associates shall strictly abide by the guidelines provided in the safety manual at all relevant stages during the contract period.

All jobs are this tender have to be executed strictly in compliance to the Safety terms and Conditions of TP Northern Odisha Distribution Limited. Please refer attached Safety terms and conditions, Annexure-X, for details. Violation of Safety norms will result in Penalty as mentioned in the above document.

11 List of Annexure

| Annexure | Particulars |
|----------|---|
| 1. | Schedule for items |
| 2. | Technical Specification |
| 3. | Schedule of Deviations if any |
| 4. | Commercial Specification |
| 5. | Checklist of all the documents to be submitted with the bid |
| 6. | Acceptance Form for participation in Reverse Auction Event |
| 7. | General Condition of Contract |

ANNEXURE I

Schedule for Items/Quantity

The bidder shall quote the prices strictly in the below format:

| S No | Material Description | Make | HSN Code | Qty | Unit Ex Work Price | GST | All-incl. (FOR) Unit Price (Rs.) | Total= (Qty x All inclusive unit price) (Rs.) | Lot |
|------|--|---|----------|------|--------------------|------|----------------------------------|---|-------|
| | | | | (EA) | (Rs.) | (Rs) | C=A+B | (Q x C) | |
| | | | | 'Q' | 'A' | 'B' | | | |
| 1 | 33kV Double Break Manual Isolator 1250A | Siemens/S & S/Switchgears and Structurs/C & S/ELPRO/Reputed | | 25 | | | | | LOT-1 |
| 2 | 33kV Double Break Manual Isolator 1250A with Earth switch | Siemens/S & S/Switchgears and Structurs/C & S/ELPRO/Reputed | | 25 | | | | | |
| 3 | 33kV Double Break Motorised Isolator 1250A | Siemens/S & S/Switchgears and Structurs/C & S/ELPRO/Reputed | | 25 | | | | | |
| 4 | 33kV Double Break Motorised Isolator 1250A with Earth switch | Siemens/S & S/Switchgears and Structurs/C & S/ELPRO/Reputed | | 25 | | | | | |
| | Supervision charges (Mandays -10 Nos) | | | 10 | | | | | |
| 5 | 11kV Double Break Manual Isolator 1250A | Siemens/S & S/Switchgears and Structurs/C & | | 25 | | | | | Lot-2 |

| | | | | | | | | |
|-----------------------------|--|---|--|-----|--|--|--|-------|
| | | S/ELPRO/Reputed | | | | | | |
| 6 | 11kV Double Break Manual Isolator 1250A with Earth switch | Siemens/S & S/Switchgears and Structurs/C & S/ELPRO/Reputed | | 25 | | | | |
| 7 | 11kV Double Break Motorised Isolator 1250A | Siemens/S & S/Switchgears and Structurs/C & S/ELPRO/Reputed | | 25 | | | | |
| 8 | 11kV Double Break Motorised Isolator 1250A with Earth switch | Siemens/S & S/Switchgears and Structurs/C & S/ELPRO/Reputed | | 25 | | | | |
| | Supervision charges (Mandays -10 Nos) | | | 10 | | | | |
| 9 | 33kV AB Switch 1250A | Siemens/S & S/Switchgears and Structurs/C & S/ELPRO/Reputed | | 100 | | | | Lot-3 |
| | Supervision charges (Mandays -5 Nos) | | | 5 | | | | |
| 10 | 11kV Ab Switch 1250A | Siemens/S & S/Switchgears and Structurs/C & S/ELPRO/Reputed | | 100 | | | | Lot-4 |
| 11 | Supervision charges (Mandays -5 Nos) | Siemens/S & S/Switchgears and Structurs/C & S/ELPRO/Reputed | | 5 | | | | |
| Total Price (All Inclusive) | | | | | | | | - |

Quantity may be changed at TPNODL discretion. We reserve the right to split the order quantity to any extent.

Prices quoted shall be firm and Rate Contract shall be valid for a period of 18 months from the placement of contract. RO shall be placed as per the requirement of TPNODL.

BA to mandatorily provide the GSTN for the billing location. The order shall be issued only for the billing address:

| GSTN | Billing Address |
|------|-----------------|
| | |

ANNEXURE II

Attached after GCC

CONFIDENTIAL

ANNEXURE III

Schedule of Deviations

Vendor shall refrain from taking any deviations on this TENDER. Still in case of any deviations, all such deviations from this specification shall be set out by the Bidders, Clause by Clause in this schedule and submit the same as a part of the Technical Bid.

Unless specifically mentioned in this schedule, the tender shall be deemed to confirm the TPNODL's specifications:

| S. No. | Clause No. | Tender Clause Details | Details of deviation with justifications |
|--------|------------|-----------------------|--|
| | | | |
| | | | |
| | | | |
| | | | |

By signing this document we hereby withdraw all the deviations whatsoever taken anywhere in this bid document and comply to all the terms and conditions, technical specifications, scope of work etc mentioned in the standard document except those as mentioned above.

Seal of the Company:

Signature

ANNEXURE IV Commercial Specification

| S. No. | Particulars | Remarks |
|--------|---|-----------------------------------|
| 1. | Prices firm or subject to variation (If variable indicate the price variation clause with the ceiling if applicable) | Firm / Variable |
| 1a. | If variable, price variation on clause given | Yes / No |
| 1b. | Ceiling | ----- % |
| 1c. | Inclusive of GST | Yes / No (If Yes Indicate % rate) |
| 1d. | Octroi payable extra | Yes / No (If Yes indicate % rate) |
| 1e. | Inclusive of transit insurance | Yes / No |
| 2. | Delivery as per Tender | Yes / No |
| 3. | Guarantee clause acceptable | Yes / No |
| 4. | Terms of payment acceptable | Yes / No |
| 5. | Performance Bank Guarantee acceptable as per attached GCC-Supply | Yes / No |
| 6. | Liquidated damages clause acceptable | Yes / No |
| 7. | Validity (180 days) from the date of | Yes / No |

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- opening of technical bid
- | | | |
|-----|---|--|
| 8. | Inspection during stage of manufacture | Yes / No |
| 9. | Rebate for increased quantity | Yes / No (If Yes indicate value) |
| 10. | Change in price for reduced quantity | Yes / No (If Yes indicate value) |
| 11. | Covered under Small Scale and Ancillary Industrial Undertaking Act 1992 | Yes / No (If Yes, indicate SSI Registration No) |

ANNEXURE V

Checklist of all the documents to be submitted with the bid

Bidder has to mandatorily fill in the checklists mentioned below:-

| S.No. | Documents attached | Yes/No/Not applicable |
|-------|---|-----------------------|
| 1 | EMD of required value | |
| 2 | Tender Fee as mentioned in this RFQ | |
| 3 | Company profile/organ gram | |
| 4 | Signed copy of this RFQ as an unconditional acceptance | |
| 5 | Duly filled schedule of commercial specification | |
| 6 | Sheet of commercial/technical deviation if any | |
| 7 | Balance sheet for the last completed three financial years; mandatorily enclosing Profit & loss account statement | |
| 8 | Acknowledgement for Testing facilities (duly mentioned on bidder letter head) | |
| 9 | List of Machine/tools with updated calibration certificates | |
| 10 | Details of order copy (duly mentioned on bidder letter head) | |
| 11 | Order copies as a proof of quantity executed | |
| 12 | Details of Type Tests (duly mentioned on bidder letter head) | |

| | | |
|----|---|--|
| 13 | All the relevant Type test certificates as per relevant IS/IEC (CPRI/ERDA/other certified agency) | |
| 14 | Project/supply Completion certificates | |
| 15 | Performance certificates | |
| 16 | Client Testimonial/Performance Certificates | |
| 17 | Credit rating/solvency certificate | |
| 18 | Undertaking regarding non blacklisting (On company letter head) | |
| 19 | List of trained/untrained Manpower | |

Annexure VI

Acceptance Form for Participation In Reverse Auction Event

(To be signed and stamped by the bidder)

In a bid to make our entire procurement process more fair and transparent, TPNODL intends to use the reverse auctions as an integral part of the entire tendering process. All the bidders who are found as technically qualified based on the tender requirements shall be eligible to participate in the reverse auction event.

The following terms and conditions are deemed as accepted by the bidder on participation in the bid event:

1. TPNODL shall provide the user id and password to the authorized representative of the bidder. *(Authorization Letter in lieu of the same shall be submitted along with the signed and stamped Acceptance Form).*
2. TPNODL will make every effort to make the bid process transparent. However, the award decision by TPNODL would be final and binding on the supplier.
3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of TPNODL, bid process, bid technology, bid documentation and bid details.
4. The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
5. In case of bidding through Internet medium, bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, internet response issues, software or hardware hangs, power failure or any other reason shall not be the responsibility of TPNODL.
6. In case of intranet medium, TPNODL shall provide the infrastructure to bidders. Further, TPNODL has sole discretion to extend or restart the auction event in case of any glitches in infrastructure observed which has restricted the bidders to submit the bids to ensure fair & transparent competitive bidding. In case of an auction event is restarted, the best bid as already available in the system shall become the start price for the new auction.
7. In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder as a part of the tender shall be considered as the bidder's final no regret offer. Any offline

price bids received from a bidder in lieu of non-participation in the auction event shall be out-rightly rejected by TPNODL.

8. The bidder shall be prepared with competitive price quotes on the day of the bidding event.
9. The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR at TPNODL site.
10. The prices submitted by a bidder during the auction event shall be binding on the bidder.
11. No requests for time extension of the auction event shall be considered by TPNODL.
12. The original price bids of the bidders shall be reduced on pro-rata basis against each line item based on the final all inclusive prices offered during conclusion of the auction event for arriving at Contract amount.

Signature & Seal of the Bidder

Annexure VII

GCC Supply attached with this tender.

| | | |
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| Prepared By Imran Ahmad/ Swetaraj Parida | Reviewed By Vipin Chauhan | Approved By Sunil Bhattar |

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1.0 ORGANIZATIONAL VALUES

The Tata Group has always been a value driven organization. These values continue to direct the Group's growth and businesses. The six core Tata Values underpinning the way we do business are:

Integrity - We must conduct our business fairly, with honesty and transparency. Everything we do must stand the test of public scrutiny.

Understanding - We must be caring, respectful, compassionate and humanitarian towards our colleagues and customers around the world and always work for the benefit of India.

Excellence - We must constantly strive to achieve the highest possible standards in our day to day work and in the quality of goods and services we provide.

Unity - We must work cohesively with our colleagues across the group and with our customers and partners around the world to build strong relationships based on tolerance, understanding and mutual co-operation.

Responsibility - We must continue to be responsible and sensitive to the countries, communities and environments in which we work, always ensuring that what comes from the people goes back to the people many times over.

Agility - We must work in a speedy and responsive manner and be proactive and innovative in our approach.

2.0 Tata Code of Conduct

The Business Associate and TPNODL shall be bound by the provisions/ clauses mentioned in Tata Code of Conduct (TCoC) in all their dealings with stakeholders. The Associate is advised to go through the TCoC document available as Annexure-J.

3.0 CONTRACT PARAMETERS

3.1 Issue/Award of Contract

TPNODL awards the contract to the Associate in writing in the form of Purchase Order (PO) or Rate Contract (RC), hereafter referred as Contract, through in any or all of following modes physical handover / post / e-mail / web document / fax with all the attachments/enclosures which shall be part of the contract document.

On receipt of the contract, the associate shall return to TPNODL copy of the contract document duly signed by legally authorized representative of associate, within two days of Effective Date of Contract for contracts having contract execution time less than 30 days and within five days for all other contracts.

Note- In case of RC though, further Release Orders (RO) shall be issued by TPNODL on RC rates and terms & Conditions as per the requirement of TPNODL.

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3.2 Contract Commencement Date

The date of issue/award of contract shall be the Effective Date of Contract or Contract Commencement date.

3.3 Contract Completion Date

The date of expiry of Guarantee Period shall be deemed as the Contract Completion Date.

3.4 Contract Period/Time

The period from Contract Commencement Date to Contract Completion Date shall be deemed as the Contract Period/Time.

3.5 Contract Execution Completion Date

The stipulated date for completing the supply as per schedule of quantities shall be deemed as the Contract Execution Completion Date.

3.6 Contract Price /Value

The total all inclusive price/value mentioned in the PO/RC is the Contract Price/Value and is based on the quantity, unit rates and prices quoted and awarded and shall be subject to adjustment based on actual quantities supplied and accepted and certified by the authorized representative of the company unless otherwise specified in schedule of quantities or in contract documents.

3.7 Contract Document

The Contract Document shall mean and include but not limited to the following:

- NIT/Tender Enquiry, QR, Instruction to Bidders, Special Condition of Contract (SCC) of tender, GCC, Technical & Commercial Specifications including relevant annexure and attachments).
- Bids & Proposals Received from Associate including relevant annexure/attachments.
- RC/PO with agreed deviations from the tender/bid documents.
- All the Inspection and Test reports, Detailed Engineering Drawings.
- Material Dispatch Clearance Certificate (MDCC).
- Minutes of Meeting (MoM)

3.8 Contract Language

All documents, instructions, catalogues, brochures, pamphlets, design data, norms and calculations, drawings, operation, maintenance and safety manuals, reports, labels, on deliveries and any other data shall be in English Language.

The Contract documents and all correspondence between the TPNODL, Third Parties associated with the contract, and the Associate shall be in English language.

However, all signboards required indicating "Danger" and/or security at site and otherwise statutory required shall be in English, Hindi, and local languages.

3.9 Reverse Auction

TPNODL reserves the right to conduct the reverse auction (instead of public opening of price bids) for the products / services being asked for in the tender. The terms and conditions for such reverse auction events shall be as per the Acceptance Form attached in Annexure F. The

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bidders along with the tender document shall mandatorily submit a duly signed copy of the Acceptance Form as mentioned in the Annexure J as a token of acceptance for the same.

4.0 SCOPE OF WORK

All the activities that are to be undertaken by the Associate to realize the contractual deliverables in completeness form Scope of Work. Following clauses list, but not limited to, major requirements of the scope of work.

The associate shall satisfy himself and undertake fully the technical/commercial requirements of items to be supplied as listed in the Schedule of Quantities together with the tests to be performed /test reports to be furnished before dispatch, arrangement of stage and final inspections during manufacturing as per terms and conditions of contract, technical parameters & delivery terms and conditions including transit insurance to be met in order to fully meet TPNODL's requirements.

Completeness: Any supplies and services which might have not been specifically mentioned in the Contract but are necessary for the scope mentioned in Special Terms & Conditions and/or completeness of the works at the highest possible level, including any royalties, license fees & compensation to be paid, whether incurred by the associates or by a third party for the work covered in the scope, regardless of when incurred, shall be supplied/provided by the associate without any extra cost and within the time schedule for efficient, smooth and satisfactory operation and maintenance of the works at the highest possible level under Indian conditions (but according to international standards for facility of this type), unless expressly excluded from the scope of supplies and services in this Contract.

TPNODL have the right, during the performance of the Contract, to change the scope and/or technical character of the Project and/or of the supplies and services stipulated in the Contract by submitting a request in writing to the Associate. The Associate shall, within fifteen days of receipt of such request from the TPNODL, provide Purchaser with a reasonably detailed estimate of the cost of the change outlined in the request.

In the event, TPNODL requests a change, the Contract price and time shall be adjusted upwards or downwards, as the case may be and shall be mutually agreed to. The associate shall not be entitled to any extension of time unless such changes adversely affect the time schedule.

The Associate shall not proceed with the changes as requested till adjustment of contract price and time schedule where so applicable in terms of or otherwise directed by the TPNODL.

4.1 Bid Evaluation- Commercial & Technical

TPNODL reserves the right to evaluate the bid on below parameters as per the requirement:

Commercial Evaluation: The bid shall be evaluated on the basis of Qualifying Requirement parameters and other commercial parameters as mentioned in tender.

Technical Evaluation: The bid shall be evaluated on the parameters and not limited to Bidder Experience, Bidder Performance with other utility/company, internal performance feedback, Technical Specification, General Technical Parameters (GTP), Layout, Drawings etc.

TPNODL reserves the right to carry out Factory Evaluation of Manufacturer along with the Visit to executed Sites for further evaluation to ascertain bidder's manufacturing capability, quality procedures & Performance of executed works.

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5.0 PRICES/RATES/TAXES

Unless specified elsewhere in the contract document, the prices/rates are inclusive of cost of finished product for which MDCC will be issued by TPNODL, packaging and forwarding charges, freight and transit insurance charges covering loading at Associate's works, transportation to TPNODL store/site & unloading & delivery at TPNODL stores/TPNODL site, cost of documentation including all the relevant test certificates and other supportive documents to be furnished.

The Prices/Rates are inclusive of all taxes, levies, cess and duties, particularly Goods and Services Tax as applicable. All government levy / taxes shall be paid only when the invoice is submitted according to the relevant act.

The prices/rates shall remain firm till actual completion of entire supply of goods/material/equipment as per contract is achieved and shall remain valid till the completion of the contract.

The prices shall remain unchanged irrespective of TPNODL making changes in quantum in all or any of the schedules of items of contract.

5.1 Changes in Statutory Tax Structure

If rate of any or all of the statutory taxes and duties applicable to the contract changes, such changes shall be incorporated by default if the changes occur within the contract execution time and shall be applicable if the contract is executed by the Associate within the Contract Execution Time.

For execution of contracts beyond contract execution time, where the delay is not attributable to TPNODL no upward revision in tax /duties shall be considered irrespective of changes in the statutory tax structure either within the contract execution time or beyond. However, in such cases, benefits due to any downward revisions in statutory tax rates shall be passed on to TPNODL.

6.0 TERMS OF PAYMENT

On delivery of the materials in good condition and certification of acceptance by TPNODL official, Associate shall submit the Bills/Invoices in original in the name of "TPNODL Limited" to invoice desk, complete with all required documents as under:

- Test Reports (4 sets).
- MDCC issued by TPNODL.
- Packing List.
- Drawing and Catalogue.
- Guarantee/Warranty Card.
- Delivery Challan.
- O&M Manual.
- Copy of Order.
- Minutes of Meeting.

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- E-Way challan (if applicable)

Bills/ invoices shall mention Supplier's GST Number. TPNODL will make 100% payment within 30 days of submission of the Bill/Invoice complete in all respects and along with all the requisite documents mentioned above, subject to condition that Associate has furnished the requisite Security-cum-Performance Guarantee as stipulated in the contract.

6.1 Quantity Variation

Payment will be made on the basis of actual quantity of supplies/actual measurement of works accepted by TPNODL and not on the basis of contract quantity.

6.2 Full and Final Payment

Full & Final Payment in all contracts shall be made subject to the associate submitting "No Demand Certificate" in the format as per Annexure-C.

7.0 MODE OF PAYMENT

Payment shall be made through crossed RTGS/ NEFT/ Online Net banking mode whichever of the two modes chosen by the Associate, in favour of Associate's Bank Account on TPNODL records, on whose name Contract has been issued. Those Associates opting for the RTGS mode shall submit the details of Bank Account and other details as per annexure G. Further, for any payments made, TPNODL is not responsible for any consequences/disputes Associate have among the owners channel partners, sub-Associates and all such dispute/concerns shall be settled solely by the Associate.

8.0 SECURITY CUM PERFORMANCE DEPOSIT

Associates shall submit within 15 days from the effective date of issue of PO/RC, Security Performance Bank Guarantee (SPBG) in the format as per Annexure B of this document from banks acceptable to TPNODL for:

- (a) 5% of the PO value if purchase order value is more than Rs 5 Crores.
- (b) 10% of the PO value if purchase order value is less than Rs 5 Crores.

This shall remain valid till the end of the Guarantee Period of contract, plus one month.

- (c) 5% of the RC value in case of Rate Contract. This shall remain valid till the Guarantee period plus one month.

- For PO/RC values less than Rs. 5 lacs, Associate may request for deduction of amount equivalent to SPBG value from their first invoice. Such amount shall be withheld by TPNODL while processing the invoice and shall be released after completion of Guarantee Period plus one month.
- For PO/RC values less than Rs. 3 lacs, the clause (8.0) for Security cum Performance Bank Guarantee (SPBG) shall not be applicable.
- In case of RC (Rate Contract) after the expiry of RC validity, Associate shall have to submit SPBG. However, the Associate has the option to re-submit the SPBG as per actual RO

(Release Order) value issued against the RC, valid for Guarantee Period plus one month. The Guarantee Period shall be considered as per the last RO issued against the said RC. The original SPBG as submitted against the RC shall be released on submission of

| | | |
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the new SPBG to TPNODL. Alternatively, Associate may extend the validity of original SPBG only till the requisite period, i.e. Guarantee Period plus one month.

9.0 STATUTORY COMPLIANCE

9.1 Compliance to Various Acts

Associate should ensure adherence to all applicable laws, rules and regulation applicable under this contract from time to time. In case of violation any risk, costs etc shall be in associates account and keep TDPPL indemnified always till completion of contracts.

9.2 SA 8000

As TPNODL is SA 8000 compliant, it expects its Associates to follow guidelines of SA 8000:2014 on the following aspects

1. Child Labour
2. Forced or Compulsory Labour
3. Health & Safety
4. Freedom of Association & Right to Collective Bargaining
5. Discrimination
6. Disciplinary Practices
7. Working Hours
8. Remuneration
9. Management System

9.3 Affirmative Action

TPNODL appreciate and welcome the engagement/employment of persons from SC/ST community or any other deprived section of society by their business associates.

Relaxation in Contract Clauses under Affirmative Action for SC/ ST Business Associates**

TPNODL believes that inclusive growth is the key to sustainable development, and to promote the same Policy on Affirmative Action for Scheduled Caste & Scheduled Tribe Communities has been adopted across the company.

Under the same pre-text, and to promote entrepreneurship among SC/ST community TPNODL has taken initiative by proposing relaxations in contract clauses as per below:

| S. No | Initiative | for SC/ ST BA's | Guideline Document |
|-------|----------------------------|--|------------------------------|
| 1 | Tender Fees | 100% waiver for SC/ST community | All Open Tenders |
| 2 | Earnest Money Deposit | 50 % relaxation of estimated EMD value | All limited and Open Tenders |
| 3 | Performance Bank Guarantee | 50% relaxation in PBG for order value above 50 lacs else 25% relaxation | All limited and Open tenders |
| 4 | Turnover | 25% relaxation in company turnover under qualifying requirement criteria | All Open Tenders |

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****Classification of BAs under SC/ST shall be governed under following guidelines:**

- Proprietorship/ Single Ownership Firm: Proprietor of the firm should be from SC/ST community. Governing document shall be duly audited balance Sheet for the last FY bearing the name of proprietor.
- Partnership Firm: Only such firms shall qualify which have SC/ST partners holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Partnership Deed and audited balance sheet/ ITR for last FY.
- Private limited company: Only such firms shall qualify which have SC/ST directors holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

Note: Certification from SC/ST commission shall be required for deciding upon SC/ST status of a person.

9.4 MSME Development ACT 2006

Provisions for Firms falling in The Micro, Small and Medium Enterprise Development Act 2006:-

- Business Associate is requested to inform the TPNODL if they fall under provisions of The Micro, Small and Medium Enterprises Development Act, 2006 legislation, and provide necessary documents to TPNODL. The Associate also needs to mention the relevant details on their invoice/ bill.
- Business Associate shall submit the self-undertaking of registration in MSME category at the time of bidding as well as on an annual basis to TPNODL, enabling them to avail the consequent benefits, failing which TPNODL may take appropriate action against such defaults.
- Business Associates falling in MSME category shall submit the Tender Fee when participating in TPNODL tenders. However, they are eligible to submit concessional EMD at 50% of the EMD otherwise applicable.

9.5 ISO 14001

The vendor to confirm whether their organization is ISO 14001 certified. If not, the Vendor must certify that the handling, use and disposal of their product/ by-products conform to practices consistent with sound environment management and local statues. The Vendor shall ensure that all the wastes are disposal in environmental friendly way with strict compliance to applicable laws including adherence to MoEF guidelines with respect to the disposal of batteries, lead waste, copper cables, ash, waste oil, e-waste etc. which shall be disposed through MoEF approved parties only. The vendor shall also dispose off the e-waste generated at the end of the product life cycle at its own costs and risk as per the MoEF guidelines/ Orders

10.0 QUALITY

10.1 Knowledge of Requirements

The Associate shall be deemed to have carefully examined and to have knowledge of the equipment, the general and other conditions, specifications, schedules, drawings, etc. forming

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part of the Contract and also to have satisfied himself as to the nature and character of the work to be executed and the type of the equipment and duties required including wherever necessary of the site conditions and relevant matters and details. Any information thus procured or otherwise obtained from TPNODL/Consultants shall not in any way relieve the Associate from his responsibility and executing the works in accordance with the terms of contract.

10.2 Material/Equipment/Works Quality

The items / works under the scope of the Associate shall be of the best quality and workmanship according to the latest engineering practice and shall be manufactured from materials of best quality considering strength and durability for their best performance and, in any case, in accordance with the specifications set forth in this Contract. All material shall be new. Substitution of specified material or variation from the process of fabrication/ construction/ manufacture may be permitted but only with the prior written approval of the TPNODL.

10.3 Adherence to Rules & Regulations

The Associate shall procure and/or fabricate/erect all materials and equipment in accordance with all requirements of Central and State enactment, rules and regulations governing such work in India and at site. This shall not be construed as relieving the Associate from complying with any requirement of TPNODL as enumerated in the Contract which may be more rigid than and not contrary to the above mentioned rules, nor providing such construction as may be required by the above mentioned rules and regulations. In case of variance of the Technical Specification from the laws, ordinance, rules and regulations governing the work, the Associate shall immediately notify the same to the TPNODL. It is the sole responsibility of the Associate, however, to determine that such variance exists. Wherever required by rules and regulations, the Associate shall also obtain the statutory authorities' approval for the plant, machinery and equipment to be supplied by the Associate.

10.4 Specifications and Standards

The Associate shall follow all codes and standards referred in the Contract Document. Codes and standards of other may be followed by the Associate with the prior written approval of TPNODL, provided materials, supplies and equipment according to the standard are equal to or better than the corresponding standards specified in the Contract.

Brand names mentioned in the Contract documents are for the purpose of establishing the type and quality of products to be used. The Associate shall not change the brand name and qualities of the bought out items without the prior written approval of the TPNODL. All such products and equipment shall be used or installed in strict accordance with original manufacturer's recommendations, unless otherwise directed by the TPNODL. In any circumstances the codes, specimen and standards prescribed by any government agency should not be violated.

11.0 INSPECTION/PARTICIPATION

11.1 Right to Carry Out Inspection

TPNODL reserves the right to send its representatives for inspection or participation at various stages of contract execution listed below, applicable as per contract construction.

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- During basic design and detail engineering of material/ Equipment carried out by Associate /Outsourced Agencies.
- During manufacturing stages of the product at Associate's/Associate's Outsourced Agency's Plant/Facility.
- During Pre-dispatch Inspection and Testing of finished/manufactured product at Associate's/Associate's outsourced Agency's Plant/Facility.
- During Installation & Commissioning Activities/Stages.
- Prior to Clearing of the completed installation for commissioning.
- Any other stage as find appropriate by TPNODL during contract execution time.

All inspections and participations shall be carried out by TPNODL giving written intimation to the Associate or receiving appropriate advance written inspection call from the Associate, unless otherwise specified elsewhere in the contract document.

MDCC request shall be submitted by BA to TPNODL at least 7 days before inspection date.

11.2 Facilitating Inspection

The Associate shall provide all opportunities and information to TPNODL's engineers to get acquainted with the technical know-how and the methods and practices adopted by the Associate in basic and detail engineering. The Associate shall provide documents, drawings, calculations etc. as may be required by TPNODL's Engineers.

The Associate shall provide free of charge office accommodation, office facilities, secretarial services, communication facilities, general and drawing office stationary, etc. as may be reasonably required by the TPNODL's engineers. Similarly, facilities shall also be provided by Associate's outsource agencies/partners/authorized dealers (collectively termed as sub associates) if such basic and detail engineering activities are carried out in the design offices of sub-Associates.

The Associate shall be responsible for the safety of employees of TPNODL/Third Party Agency when they are at the Associate's /Associate's outsource agency's plant or facility for carrying out/witnessing inspection/testing. All statutory safety precautions as applicable shall be followed by the Associate during Inspection Testing. If TPNODL inspectors are not satisfied with the safety arrangements at the plant, TPNODL have the right to call off inspection till such time corrective action is taken by the Associate.

Before raising the call for pre-dispatch final inspection and testing, the Associate shall conduct all the tests—type tests, routine tests etc-as specified in the contract document and submit copies of the test certificates to TPNODL along with the inspection call, for scrutiny of TPNODL.

The Associate and TPNODL shall jointly document all the observations, comments and action points after completion of inspection and it shall be binding on the Associate to provide compliance on all the points requiring compliance and furnish the compliance report to the designated authority of TPNODL for receiving clearance for dispatch of materials

11.3 Third Party Nomination

TPNODL also may nominate a third party for the purpose of carrying out the inspection and such an agency shall be entitled to all the rights and privileges of TPNODL as far as conducting the inspection.

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11.4 Waiver of Inspections

TPNODL on its own discretion shall chose to waive off any inspection and ask the Associate to submit all the test reports as applicable as per contract specifications, related to inspection and testing of the goods ordered for scrutiny and clearance for dispatch.

11.5 Incorrect Inspection Call

In case it is observed that the material offered for inspection is not ready at the time of TPNODL inspection visit rendering it as futile, all costs towards such inspection shall be recovered from the BA. Taxes as applicable on such recoveries shall be borne by the BA.

12.0 MDCC & DELIVERY OF MATERIALS

12.1 Material Dispatch Clearance Certificate

Associate shall deliver material/goods/equipment against Supply Contracts or Supply Part of Composite/Service Contracts only after receiving Material Dispatch Clearance Certificate (hereafter termed as MDCC) issued by designated authority of TPNODL. Material delivered at TPNODL stores or at project site without a valid MDCC issued by the designated official of TPNODL shall be rejected. MDCC shall be issued to associate furnishing compliance report on the action points documented during pre-dispatch inspection and testing at Associate's/ Sub Associate's plant/ facility. In case Pre-dispatch inspection is waived at the discretion of TPNODL, then, MDCC shall be issued on receiving all the test reports-routine& type-from the Associate and finding them in order.

The associate shall include and provide for securely protecting and packing the materials so as to avoid loss or damage during handling and transport by air, sea, rail and road or any other means.

All such packing shall allow to the extent possible for easy removal and checking at Site. The associate shall take special precautions to prevent rusting of steel and iron parts during transit by sea. Gas seals or other materials shall be utilized by the associate for protection against moisture during transit of all Plant and Equipment.

Each Equipment or parts of Equipment shall be tagged with reference to the assembly drawings and corresponding part numbers. Each bale or package shall contain a packing note quoting specifically the name of the associate, item description, quantity, item / package identification.

All packing cases, containers, packing and other similar materials shall be new and supplied free by the associate and it shall not be required to be returned to the associate.

Notwithstanding anything stated in this clause, the associate shall be entirely responsible for loss, damage or depreciation or deterioration to the materials and supplies due to faulty and/or insecure packing or otherwise during transportation to the Site until otherwise provided herein.

In case of the consignments dispatched by road, the associate shall ensure that it or its subcontractors:

- i) Identify and obtain the correct type of trucks/trailers, keeping in view the nature of consignments to be dispatched.
- ii) Take such actions as may be necessary to avoid all possible chances of damages during transit and to ensure that all packages are firmly secured.

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Timelines for inspection and MDCC is as below:

| S. No. | Inspection | MDCC issuance time including Inspection time (max.) |
|--------|----------------|---|
| 1 | Outside Odisha | 12 days |
| 2 | Within Odisha | 5 days |
| 3 | Waiver* | 3 working days |

* Associate is expected to raise the inspection call assuming that Inspection shall be carried out by TPNODL. The decision for waiver of inspection shall be on sole discretion of TPNODL.

12.2 Right to Rejection on Receipt

Goods/Material/Equipment delivered in condition physically damaged & incomplete as a product ordered, or not packed and transported as per the terms and conditions of the contract is liable to be rejected. Such item shall be lifted back by Associates within 15 days from receipt of rejection note from TPNODL and have to supply back the material within next 30 days or within the timeframe mutually decided by Associate and TPNODL.

If delivery of the material is beyond the agreed time, Liquidated damage clause, mentioned in this GCC separately shall be applicable; but the period for levy of LD shall be considered as per the original delivery schedule and not from the agreed timelines for material rectification.

12.3 Consignee

Unless otherwise specified in the Contract Document, Materials/Goods/Equipment shall be consigned to "Stores-In-Charge", TPNODL, Bhubaneswar.

12.4 Submission of mandatory documents on Delivery

Following documents shall be mandatorily submitted by BA along with supply of material to TPNODL stores/site:

| S. No. | Documents | Requisite |
|--------|--|--|
| 1 | Invoice copy in original | With all consignments |
| 2 | LR copy | Wherever required |
| 3 | Packing list | With all consignments |
| 4 | MDCC | With all consignments |
| 5 | Purchase order / Release order | Signed copy |
| 6 | Test certificates | With all consignments |
| 7 | Inspection/JVR report | In case pre-dispatch inspection is conducted |
| 8 | Device data in CD as per template for metering items | Wherever applicable |

12.5 Dispatch and Delivery Instructions

| S. No. | Instructions |
|--------|--|
| 1 | Purchase order/ Release order no. shall be mentioned on invoice and on material |
| 2 | TPNODL material code and material description shall be mentioned in invoice and on material. |

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| 3 | “Property of TPNODL” shall be embossed on material. |
| 4 | The material shall be properly sealed and packed in standard packing as per purchase order terms & conditions. |
| 5 | The weight and quantity of material shall be mentioned wherever applicable |
| 6 | The material supplied shall be co-related with the packing list. |
| 7 | The name plate detail on equipment shall include Material code, Material description, specification detail of material [as applicable], Serial No. Year of manufacturing, PO/RO no. and date, “PROPERTY OF TPNODL, Bhubaneswar”, Guarantee period and Associate’s name. |
| 8 | In case of manual unloading, supplier / transporter shall deploy sufficient Labour for unloading the material at TPNODL central store. For heavy item(s), crane will be provided by TPNODL [unloading cost will be recovered from the associate]. |
| 9 | The driver should have valid License and one helper in truck. All the documents of truck like registration papers, PUC etc. should be available in Truck. |
| 10 | BA representative should accompany the material and get it unloaded / stacked in his presence wherever possible. |

13.0 GUARANTEE

13.1 Guarantee of Performance

Associates shall stand guarantee that the equipment and material supplied under the contract is free from design, manufacturing, material, construction, erection & installation and workmanship & quality defects and is capable of its due, rated and intended quality performance, as an integrated product delivered under the contract, for a specific period termed as Guarantee Period(as elaborated elsewhere in this clause). The Associate should also guarantee that the equipment/material is new and unused except for the usage required for the tests and checks required as part of quality assurance.

13.2 Guarantee Period

The Guarantee Period will be equipment/service/work specific and shall be as specified in the Standard Specifications of TPNODL for the equipment/material/service/work and where standard specifications are not part of contract documents or guarantee period is not specified in the standard specifications,, the guarantee period shall be as per the Special Terms and Conditions of the Contract. In case of no mention of the guarantee period in standard specifications or SCC Guarantee Period will be 12 Months from the Date of Commissioning or 24 months from the date of delivery of final lot of supplies made, whichever is earlier.

13.3 Failure in Guarantee Period (GP)

If the equipment and material supplied under the contract fails to perform its due, rated & intended quality performance, during the Guarantee period, the associate is liable to undertake repair/rectify/replace the equipment and material supplied within time frame specified in the SCC or elsewhere in the contract documents at associate’s cost to make the equipment and material supplied/service or work rendered under the contract of performing its due, rated and intended quality performance. If Associate fails to repair/rectify/replace the equipment or material supplied rendered under the contract, failed in Guarantee Period, TPNODL will be at liberty to get the same done at Associate’s risks and costs and recover all such expenses plus the TPNODL’s own charges (@ 20% of expenses incurred), from the Associate or from the “Security cum Performance Deposit” as the case may be.

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If during the Warranty/ Guarantee period some parts of the supplies are replaced owing to the defects/ damages under the Warranty, the Warranty period for such replaced parts shall be until the expiry of twelve months from the date of such replacement or renewal or until the end of original Guarantee period, whichever is later.

Any repairs during the Guarantee Period shall be carried out by the Associate within 30 days of reporting the issue to Associate by TPNODL. However, if replacement of the Equipment is required, Associate shall notify the same to TPNODL within 7 days of reporting the issue by TPNODL. Thereafter, the total time for supply of new equipment/ material shall be equal to the original delivery period of that equipment/ material as specified in the Contract. In case the Associate is not able to rectify/ replace the faulty equipment/ material within the stipulated timelines as mentioned above, penalty shall be levied as per the Liquidated Damages clause mentioned in this document. The penalty amount shall be recovered from the payment due to the vendor or by encashment of the SPBG as the case may be.

13.4 Cost of repairs on failure in GP

The cost of repairs/rectification/replacement, required transportation, site inspection /mobilization/dismantling and re-installation costs as applicable, to be borne by Associate. The Associate has to ensure that the interruption in the usage of intended purpose of the equipment is minimized to the maximum extent In lieu of the time taken for repairs/rectification/replacement.

13.5 Guarantee period for Goods Outsourced

If the Associate outsources partly equipment/materials/services from third party as mutually agreed upon at the pre award stage of contract, TPNODL shall have the benefit of any additional guarantee period if provided by the third party for the part supplied/executed by them.

13.6 Latent Defect

Hidden defects in manufacturing or design of the product supplied and which could not be identified by the tests conducted but later manifested during operation of the equipment are termed as latent defects. Associates shall further be responsible for 'free replacement' for another period of THREE years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by the Company.

13.7 Support beyond the Guarantee Period

The Associate shall ensure availability of spares and necessary support for a period of atleast 10 years post completion of guarantee period of equipment supplied against the contract.

14.0 LIQUIDATED DAMAGES

- a) For supplies which are of standalone use, multiple in quantities and having a single final delivery schedule, Liquidated damages shall be levied without prejudice to any of the other contractual rights of TPNODL, as described below:

For delay of each week and part thereof from the delivery schedule specified in the contract, 1% of contract value corresponding to undelivered quantity, provided full quantity is supplied within 130% of the original contract time. If full contractual quantity is not delivered within 130% of contract time for delivery, TPNODL has the right to levy LD on the entire contract value, subject to a maximum of 10% of the total contract value.

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- b) For Supplies having phased delivery schedule as per contract terms, standalone use and multiple in quantities, Liquidated damages shall be levied without prejudice to any of the other contractual rights of TPNODL, as described below:

For the purpose of calculating and applying LD, each delivery lot shall be considered separately. For delay of each week and part thereof, from the delivery schedule specified for the lot, 1% of the contract value corresponding to the undelivered quantity of the lot subject to a maximum of 10% of the total contract value of the subject lot. However, if full contractual quantity is not delivered within 130% of contract time for delivery, TPNODL has the right to levy LD on the entire contract value, subject to a maximum of 10% of the total contract value. Deduction of LD shall be on landed cost i.e contract value inclusive of taxes and in pursuant statutory compliance GST would be applicable at the stipulated rate and the same shall be borne by Business Associate. In case of LD deduction, a GST invoice shall be issued by TPNODL as a proof of deduction/ recovery.

14.1 LD Waiver Request

Any request of LD waiver shall be submitted within thirty (30) days of deducting LD. Request submitted beyond the timeline shall not be entertained.

15.0 UNLAWFUL ACTIVITIES

The Associate shall have to ensure that none of its employees are engaged in any unlawful activities (whether covered under the scope of the present GCC or not) subversive of the TPNODL's interest failing which appropriate action (legal or otherwise) may be taken against the Associate by the TPNODL, in accordance with the terms of the present GCC.

16.0 CONFIDENTIALITY

Associate and its employees or representatives thereof shall strictly maintain the confidentiality of various information they come across while executing the contract as detailed below.

16.1 Documents

All maps, plans, drawings, specifications, schemes and other documents or information related to the Contract/Project and the subject matter contained therein and all other information given to the Associate by the TPNODL in connection with the performance of the contract shall be held confidential by the Associate and shall remain the property of the TPNODL and shall not be used or disclosed to third parties by the Associate for any purpose other than for which they have been supplied or prepared. The Associate may disclose to third parties, upon execution of confidentiality agreements, such part of the drawings, specifications or information if such disclosure is necessary for the performance of the Work provided such third parties agree in writing to keep such information confidential to the same extent and degree as provided herein, for the benefit of the TPNODL.

16.2 Geographical Data

Maps, layouts and photographs of the unit/plant including its surrounding regions showing vital installation for national security of country or those of TPNODL shall not be published or disclosed to the third parties or taken out of the country without prior written approval of the TPNODL and upon execution of confidentiality agreements satisfactory to the TPNODL with such third parties prior to disclosure.

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16.3 Associate's Processes

Title to secret processes if any developed by the Associate on an exclusive basis and employed in the design of the equipment shall remain with the Associate. TPNODL shall hold in confidence such processes and shall not disclose such processes to the third parties without prior approval of the Associate and execution by such third parties of secrecy agreements satisfactory to the Associate prior to disclosure. Upon completion of contract, such processes shall become the property of the TPNODL. Title to technical specifications, drawings, flow sheets, norms, calculations, diagrams, interpretations of test results, schematics, layouts and such other information, which the Associate has supplied to the TPNODL under the Contract shall be passed on to the TPNODL. The TPNODL shall have the right to use these for construction, erection, start-up, Trial Run, operation, maintenance, modifications and/or expansion of the works including for the manufacture of spare parts.

16.4 Exclusions

The provision of Clauses 16.1 to 16.3 shall not apply to information:

- Which at the time of disclosure are in the public domain which later on become part of public domain through no fault of the party concerned, or
- Which were in the possession of the party concerned prior to disclosure to him by the other party, or
- Which were received by the party concerned after the time of disclosure without restriction on disclosure or use, from a third party who did not acquire such information directly or indirectly from the other party or has no obligation of confidentiality for such information.

16.5 Violation

In case of violation of this clause, the Associate is liable to pay compensation and damages as may be determined by the competent authority of TPNODL.

17.0 INTELLECTUAL PROPERTY RIGHTS

If, in the course of performance of its functions and duties as envisaged by the scope of the present GCC, the Associate acquires or develops, any unique knowledge or information which would be covered, or, is likely to be covered within the definition of a trademark, copyright, patent, business secret, geographical indication or any other form of intellectual property right, it shall be obliged, under the terms of this present GCC, to share such knowledge or information with the TPNODL. All rights, with respect to, or arising from such intellectual property, as afore mentioned, shall solely vest in TPNODL.

Moreover, the Associate undertakes not to breach any intellectual property right vesting in a third party/parties, whether by breach of statutory provision, passing off, or otherwise. In the event of any such breach, the Associate shall be wholly liable to compensate, indemnify or make good any loss suffered by such third party/parties, or any compensation/damages arising from any legal proceeding/s, or otherwise. No liability of TPNODL shall arise in this respect, and any costs, damages, expenses, compensation payable by TPNODL in this regard to a third party/parties, arising from a legal proceeding/s or otherwise, shall be recoverable from the Associate.

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18.0 INDEMNITY

The Associate shall at all times indemnify, keep indemnified and hold harmless the TPNODL and its officers, directors, employees, affiliates, agents, successors and assigns against all actions, claims, demands, costs, charges and expenses arising from or incurred by reason of any infringement of patent, trade mark, registered design, copy rights and/or industrial property rights by manufacture, sale or use of the equipment supplied by the Associate whether or not the TPNODL is held liable for by any court judgement. In this connection, the TPNODL shall pass on all claims made against him to the Associate for settlement.

The Associate assumes responsibility for and shall indemnify and save harmless the TPNODL from all liability, claims, costs, expenses, taxes and assessments including penalties, punitive damages, attorney's fees and court costs which are or may be required to be paid by the TPNODL and its officers, directors, employees, affiliates, agents, successors and assigns arising from any breach of the Associate's obligations under the Contract or for which the Associate has assumed responsibilities under the Contract including those imposed under any local or national law or laws, or in respect to all salaries, wages or other compensation for all persons employed by the Associate or his Sub-Associates or suppliers in connection with the performance of any work covered by the Contract. The Associate shall execute, deliver and shall cause his Sub-Associate and suppliers to execute and deliver, such other further instruments and to comply with all the requirements of such laws and regulation as may be necessary there under to conform and effectuate the Contract and to protect the TPNODL.

The TPNODL shall not be held responsible for any accident or damages incurred or claims arising, due to the Associate's error there from prior to completion of work. The Associate shall be liable for such accidents and after completion of work for such accidents as the case may be due to negligence on his part to carry out Work in accordance with Indian laws and regulations and the specifications set forth herein.

19.0 LIABILITY & LIMITATIONS

19.1 Liability

Except for any specific liability which may be identified in the Contract and which may be payable hereunder, Associate shall not be liable for any special, incidental, indirect, or consequential Damages or any loss of business Contracts, revenues or other financial loss (or equivalents thereof no matter how claimed, computed or characterized) arising out of or in connection with the Performance of the Work or supply of Goods ***unless caused by Associate's negligence, willful misconduct or breach of contract.***

If the Associate is a joint venture or consortium, all concerned parties shall be jointly and severally bound to the TPNODL for the fulfillment of the provisions of the Contract. The consortium or the joint venture shall designate one party as their leader, who will be the coordinator between the parties and TPNODL. The constituents & leader of the consortium or joint venture shall not be changed without the prior consent of TPNODL.

TPNODL shall have no liability or any special, incidental, indirect or consequential Damages for any loss of Business Contracts, revenues or other financial loss arising out of this Contract.

19.2 Limitation of Liability

The total liability of Associate against any contract shall be limited to the Total All Inclusive Contract Value.

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20.0 FORCE MAJEURE

Force Majeure applies if the performance by either Party ("the Affected Party") of its obligations under Contract is materially and adversely affected.

"Force Majeure" shall mean any event or circumstance or combination of events or circumstances referred below and their consequences that wholly or partly prevents or unavoidably delays any Party in the performance of its obligations under this Agreement, but only and to the extent that such events and circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided even if the Affected Party had taken reasonable care:

- Act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, embargo, blockade, revolution, riot, bombs, religious strife or civil commotion, etc. ▪ Politically motivated sabotage, or terrorism, etc.
- Action or Act of Government or Governmental agency for which remedy is beyond the control of the affected parties. ▪ Any act of God.

Note: Causes like power breakdown/ shortages/fire/strikes, accidents etc do not fall under Force Majeure.

Time being the essence of the Contract, if either party is prevented from the performance of its obligations in whole or in part due to an event of Force Majeure, then provided Notice of happening of any event by the Affected Party is given to the other party within seven (7) days from the date of occurrence of such event, which DIRECTLY has impact on works and submitted details and quantum of resulting effect, but at the same time had made all possible efforts to mitigate and overcome effects thereof, the Affected Party's performance under this Contract shall be suspended until such event ceases and the Scheduled Completion shall be delayed accordingly.

If Force Majeure event(s) continue for a period of more than three months, the parties shall hold consultation to discuss the further course of action.

Neither party shall be considered to be in default or in breach of its obligation under the Contract to the extent that performance of such obligation by either party is prevented by any circumstances of Force Majeure which arise after effective date of Contract.

Neither party can claim any compensation from the other party on account of Force Majeure.

21.0 SUSPENSION OF CONTRACT

21.1 Suspension for Convenience

TPNODL may, at any time and at its sole option, suspend execution of all or any portions of the schedule of items of contract to be supplied/work to be executed by Associate under the contract by providing to the Associate at least two business days written notice for contracts having contract completion period less than sixty days and at least seven business days' notice for all other contracts.

Upon receipt of any such notice, the Associate shall respond as follows as applicable as per contract construction.

- Immediately discontinue further supply of material/goods specified in the suspension notice for supply contracts

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- Immediately discontinue further service/work and supply of materials of those services/materials/work specified in the suspension notice for service /composite contract
- Promptly make every reasonable effort to obtain suspension, upon terms satisfactory to TPNODL, of all orders, outsourcing arrangements, and rental Contracts to the extent that they relate to performance of the portion of Work suspended by the notice.
- Protect and maintain the portion of the service/Work already completed, including the portion of the Work suspended hereunder, unless otherwise specifically stated in the notice.
- Continue delivering/carrying out the supply/service/work items as per contract conditions, which do not fall under purview of the suspension notice.

On receipt of resumption notice from TPNODL, the Associate shall resume execution of contract as specified in the resumption notice, within the time frame specified in the resumption notice.

21.2 Suspension for Breach of Contract conditions.

TPNODL shall suspend execution of whole/or part thereof the contract till such time Associate complies with the conditions stipulated under section clause 22.1 for breach/default of contract conditions.

21.3 Compensation in lieu of Suspension

If the suspension of the contract in whole or in part is for convenience of TPNODL and not due to any breach of contract conditions by the associate, TPNODL at its discretion shall consider compensating all reasonable additional costs incurred by Associate in lieu of suspension of whole or part of contract, on representation of the Associate providing justified estimates of such additional costs and such estimates are found acceptable and approved by competent authority of TPNODL.

If the suspension of contract in whole or part thereof is due to breach of contract conditions (refer clause 22.1) by the Associate, Associate shall not be entitled for any compensation for any cost incurred in lieu of suspension of whole or part of contract and also shall be liable for compensating all the losses arising to TPNODL in lieu of suspension of contract. Resumption notice shall be subject to the Associate taking corrective action for the breach of contract conditions within the time frame and as per the terms specified in the suspension notice.

22 TERMINATION OF CONTRACT

22.1 Termination for Default/Breach of Contract

The contract / PO /RC shall be subject to termination by TPNODL in case of breach of the contract by the Associate which shall include but not be limited to the following:

- a. Withdrawal or intimation by the Associate of its intent to withdraw or surrender the execution / completion of the contracted work /PO or failure in ensuring adherence to any delivery schedules, in deviation of the contract/PO.
- b. Refusal or neglect on the part of the Associate to supply material/equipment of quantity or quality as specified by TPNODL and within the timeframe as specified in the contract document or refusal or neglect to execute the services/work in terms of the agreed standards of quantity or quality and/or within the timeframe specified in the contract/PO.

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- c. Failure in any respect to perform any portion of the Work contracted with promptness, diligence, or in accordance with the terms of the contract.
- d. Failure to furnish guarantees as specified and /or failure to comply with the terms thereof.
- e. Failure to furnish such relevant documents or information within the time specified which may be necessary for due execution / completion of the works and documentation.
- f. Liquidation, bankruptcy either voluntary or involuntary OR entering into any composition or compromise with its creditors, or Insolvency.
- g. In case any reasonable information has been received by TPNODL that Associate has adopted/ or attempted to adopt any unethical conduct, action in award of the contract /PO or at any time thereafter.
- h. Failure to comply with applicable statutory provisions as contained in the contract or failure to comply with the applicable laws.
- i. Failure to comply with safety regulations/clauses stipulated in the contract or as may be generally instructed by TPNODL.

If the default or breach as specified under clause 22 (except sub clause g thereof) be committed by the associate for the first time, TPNODL shall issue, along the with notice of default or breach, a warning notice instructing the associate to take remedial/corrective action within the time frame stipulated in the warning notice and not to repeat the same in future. The timeframe for corrective action by the associate shall be specific to the nature of breach of contract and the same shall not be objected to by the Associate. If the Associate fails to comply with the instructions in the warning notice or in taking corrective action to the satisfaction of TPNODL then TPNODL may terminate the entire or part of contract at its discretion by issuing termination notice without incurring any liability on this ground.

In case the contract is terminated for any breach of the nature specified in clause 22 g stated above, TPNODL shall have the right to terminate all the contracts TPNODL is having with the Associate by issuing termination notice which shall be without prejudice to the other rights of TPNODL available to it under law.

Without prejudice to its right to terminate for breach of contract, TPNODL may, without assigning any reason, terminate the Contract in whole or in part at any time at its discretion while the contract is in force by serving a written notice of two weeks to the Associate.

In the event of TPNODL having proceeded with termination of the contract the associate shall comply and proceed further in the following manner:

- a) Associate shall discontinue the supply, on the expiry of the said period of two weeks.
- b) Associate shall ensure that no further steps are being taken towards discharge of the obligations, terms and conditions as contained in the contract/PO. This shall include initiation of actions not limited to discontinuation of other allied and associated arrangements which the associate might have entered into with third parties for due discharge of its obligations under the contract with TPNODL.
- c) The Associate shall perform thereafter such tasks as may be necessary to preserve and protect the terminated portion of the material/service/work in progress and the materials and equipment at TPNODL sites or in transit thereto. However the associate shall

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continue to fulfill its contractual obligations with regard to the part of contract not terminated.

- d) It shall be open for TPNODL to conduct a joint assessment with the associate of the material, supplies, equipment ,works or in general as to the subject matter of the contract in regard to which the associate claims having completed its obligations before or during such termination.
- e) It shall be open to TPNODL to seek invocation of the performance bank guarantee or any other guarantee or other security deposit by whatever name called submitted by the associate, which shall not be objected to or protested against by the associate.

In case of termination of the contract the parties agree to be governed inter alia by the following:

- a) In case TPNODL exercises its right of termination as stated above the associate shall not dispute or object to the same.
- b) The Associate shall be entitled to receive and claim only such payments OR sums of money from TPNODL as may be found payable to it in regard to works executed by it under the terms of the contract and no other claim of any nature whatsoever shall be made by the Associate.
- c) All such provisions which the parties have agreed to survive and prevail even after termination of the contract shall remain effective despite the termination.

In the event of such termination, TPNODL may finish the Work by whatever method it may deem expedient, including the hiring of services and /or purchase of material equipment from such third parties as TPNODL may deem fit or may itself provide any labor or materials and perform any part of the Work. The associate undertakes to bear the incremental costs if any paid by TPNODL in such a case attributable to failure on the part of the associate. The Associate in such a case shall not be entitled to receive any further payments and any sums found payable to it may be adjusted by TPNODL against the amount recoverable from him on this ground. The same shall be without prejudice to other rights available to TPNODL under law against the associate.

Upon the termination of any of the contract due to occurrence of any circumstances provided in clauses stated above and constituting repeated breach or misconduct , TPNODL shall be entitled to bar the associates its agents , affiliates from undertaking any negotiation / tendering, bidding , participation activities concerning TPNODL for a period of two years from date of such termination. The same shall be without prejudice to other rights available to TPNODL.

22.2 Termination for Convenience of Associate

Associate at its convenience may request for termination of contract, clearly assigning the reason for such request. TPNODL has full right to accept, reject or partially accept such request. However, associate shall continue its supply as per contract till final approval is given to associates for such termination.

22.3 Termination for Convenience of TPNODL

TPNODL at its sole discretion may terminate the contract by giving 30 days prior notice in writing or through email to the Associate. TPNODL shall pay the Associate for all the supplies/

| | | |
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services rendered till the actual date of contract termination against submission of invoice by the Associate to that effect.

23.0 DISPUTE RESOLUTION & ARBITRATION

In case of any dispute or difference the parties shall endeavour to resolve the same through conciliatory and amicable measures within 15 Days failing which the matter may be referred by either party for resolution by the sole arbitrator to be appointed mutually by both the parties. The arbitral proceedings shall be conducted in accordance with Arbitration and Conciliation Act 1996 and the place of arbitration shall be Bhubaneswar. The language to be used at proceedings shall be English and the award of the arbitrator shall be final and binding on the parties. The parties shall bear their respective costs of arbitration. The associate shall continue to discharge its obligations towards due performance of the works as per the terms of the contract during the arbitration proceedings unless otherwise directed in writing by TPNODL or suspended by the arbitrator. Further, TPNODL shall continue making such payments as may be found due and payable to the associate for such works.

23.1 Governing Laws and Jurisdiction

The parties shall be subject to the jurisdiction of the courts of law in Bhubaneswar and any matter arising here from shall be subject to applicable law in force in India.

24.0 ATTRIBUTES OF GCC

24.1 Cancellation

The Company reserves the right to cancel, add, delete at its sole discretion, all or any terms of this GCC or any contract, order or terms agreed between the parties in pursuance without assigning any reasons and without any compensation to the Associates.

24.2 Severability

If any portion of this GCC is held to be void, invalid, or otherwise unenforceable, in whole or part, the remaining portions of this GCC shall remain in effect.

24.3 Order of Priority

In case of any discrepancies between the stipulations in General Conditions of the Contract (GCC) and Special Conditions of Contract (SCC), the GCC shall stand superseded by the SCC to the extent stipulated hereinabove while balance portion of respective clauses of GCC shall continue to be applicable.

25.0 ERRORS AND OMISSIONS

The Associate shall be responsible for all discrepancies, errors and omissions in the drawings, documents or other information submitted by him, irrespective of whether these have been approved, reviewed or otherwise accepted by the TPNODL or not. However any error in design/drawing arising out of any incorrect data/written information from TPNODL will not be considered as error and omissions on part of the Associate.

26.0 TRANSFER OF TITLES

The title of ownership and property to all equipment, materials, drawings & documents shall pass to the TPNODL on acceptance of material by store/site after Inspection.

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However, such passing of title of ownership and property to the TPNODL shall not in any way absolve, dilute or diminish the responsibility and obligations of the Associate under this Contract including loss or damages and all risks, which shall vest with the Associate.

27.0 INSURANCE

The Contractor shall take out the Insurance Policies which shall cover all risks including the following, as applicable:-

- a) The value of the policy shall cover the total value of all the items till they are handed over to TPNODL.
- b) TPNODL shall be the principal holder of the policy. The Associate shall be the loss payee under the policy. Associate / Sub-contractor of the Associate shall not be holders or beneficiaries in the policy nor shall they be named in the policy. TPNODL reserves the exclusive right to assign the policy.
- c) While the payment of premium may be phased in agreement with the insurance company, at no time shall goods and services required to be provided by the associate shall remain uninsured in accordance with (a) above.
- d) A copy of the Insurance policy shall be made available to TPNODL prior to first dispatch lot of any Equipment and policy shall be kept alive and valid at all times up to the stage of final acceptance.
- e) TPNODL reserves the right to take out whatever policy that is deemed necessary by him if the associate fails to keep the said policy alive and valid at all times and/or causes lapses in payment of premium thereby jeopardizing the said policy. The cost of such policy(s) shall be recovered / deducted from the amount payable to the associate.
- f) The policy shall ensure that the TPNODL's decision regarding replacement of goods damaged, lost or rendered unusable shall be final.

In all cases, the associate shall lodge the claims with the underwriters and also settle the claims and shall also notify TPNODL of any filed claims. However, the associate shall proceed with the repairs and/or replacement of the equipment/components without waiting for the settlement of the claims. In case of seizure of materials by concerned authorities, the associate shall arrange prompt release against bond, security or cash as required. TPNODL, upon request by the associate, will extend all reasonable assistance to the associate in such a case.

All the insurance claims shall be processed and settled by the associate and the missing/damaged items shall be replaced/repared by them without any extra cost to TPNODL and without affecting the completion time.

28.0 SUGGESTIONS & FEEDBACK

We welcome all our Business Associates to write to us about their experience with TPNODL; be it our Company, our services or our people. Each and every concern, issue, query and suggestion from you will help us to become a better company to work with and shall help us develop a strong bonding of trust and a long term relationship with you.

You may send your feedback by filling up our Business Associate Feedback Form enclosed herewith as *Annexure-I*. You can also log on to our website www.tpnodl.com to provide your feedback.

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- Suggestions for us
- Feedback form
- Knowledge Sharing/ Experience with TPNODL
- Any issues with TPNODL.

Submission of feedback form is mandatory before the release of final payment to the BA.

29.0 CONTACT POINTS

In case Business Associate needs information with respect to payments or has any grievances, same may be lodged by log on to our website www.tpnodl.com

30.0 LIST OF ANNEXURES

| S. No. | Subject | Annexure |
|--------|---|----------|
| 1. | Performa for Bid Security Bank Guarantee | A |
| 2. | Performa for Performance Bank Guarantee (CP cum EP) | B |
| 3. | Performa for No Demand Certificate by Associate | C |
| 4. | Performa For Application For Issuance of Consolidated TDS Certificate | D |
| 5. | Business Associate Feedback Form | E |
| 6. | Acceptance Form For Participation In Reverse Auction Event | F |
| 7. | Form for RTGS Payment | G |
| 8. | Vendor Appraisal Form | H |
| 9. | Manufacturer Authorization Form | I |
| 10. | Tata Code of Conduct | I |

ANNEXURE-A

PROFORMA FOR BID SECURITY BANK GUARANTEE

**TP Northern Odisha Distribution Limited
Balasore**

WHEREAS, (Name of the Bidder) _____
(hereinafter called "the BIDDER") has submitted his bid dated _____ for the
(Tender No. & Name of Contract) _____ (hereinafter
called "the BID").

KNOW ALL men by these presents we (Name of the
Bank) _____ of (Name of the
Country) _____ having our registered
office at _____ (hereinafter called "the BANK) are bound unto

Approved Copy of GCC (TPNODL)

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TPNODL Limited (TPNODL) in the sum of _____ for which payment well and truly to be made to the TPNODL the Bank binds himself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this _____ day of _____ 20_____.

The CONDITIONS of this obligation are:

- i) If the Bidder withdraws his Bid during the period of bid validity specified in the Proforma of Bid or
- ii) If the Bidder having been notified of the acceptance of his Bid by the TPNODL during the period of bid validity fails or refuses to furnish the Contract Performance Bank Guarantee, in accordance with the Instructions to Bidders.

We undertake to pay the TPNODL upto the above amount upon receipt of its first written demand, provided that in its demand the TPNODL will note that amount claimed by it is due to it owing to the occurrence of one or both conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force upto and including the date (No of days as mentioned in tender enquiry) days after the closing date of submission of bids as stated in the Invitation to Bid or as extended by you at any time prior to this date, notice of which extension to the Bank being hereby waived, and any demand in respect thereof should reach the Bank not later than the above date.

DATE **SIGNATURE OF THE BANK**

WITNESS **SEAL**

(Signature, Name & Address) (At least 2 witnesses)

ANNEXURE- B

PROFORMA FOR PERFORMANCE BANK GUARANTEE (CP cum EP)

(On Rs.100/- Stamp Paper) Note:

- a) Format shall be followed in toto
- b) Claim period of one month must be kept up
- c) The guarantee to be accompanied by the covering letter from the bank confirming the signature to the guarantee

TP Northern Odisha Distribution Ltd.

Mumbai

Approved Copy of GCC (TPNODL)

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CP cum EP BG No.....

Order/Contract No.....dated.....

1. You have entered into a Contract No _____ with M/s. _____ (hereinafter referred to as "the Vendor") for the supply cum erection / civil work of _____ (hereinafter referred to as "the said Equipment") for the price and on the terms and conditions contained in the said contract.
2. In accordance with the terms of the said contract, "the Vendor" agreed to furnish you with an irrevocable, unconditional and acceptable bank guarantee for 10% of the value of contract and to be valid till the end of Guarantee period plus one month towards "Contract cum Equipment performance". For this purpose you have agreed to accept the guarantee.
3. In consideration thereof, we, _____ hereby irrevocably and unconditionally guarantee to pay to you on demand but in any case before the end of five working days from the date of the claim and without demur and without reference to "the Vendor" such amount or amounts not exceeding the sum of Rs. _____ (Rupees _____ only) being _____% (_____ percent) of the total value of the contract on receipt of your intimating that "the Vendor" has not fulfilled his contractual obligations. You shall be the sole judge for such non-fulfillment and "the Vendor" shall have no right to question such judgment.
4. You shall have the right to file / make your claim on us under the guarantee for a **further period of one month** from the date of expiry.
5. This guarantee shall not be revoked without express consent and shall not be affected by your granting time or any other indulgence to "the Vendor", which shall include but not be limited to, postponement from time to time of the exercise the same in you or any right which you may have against "the Vendor" and to exercise the same in any covenant contained or implied in the said contract or any other course or remedy or security available to you, and our Bank shall not be released from its obligations under this guarantee by

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your exercising any of your rights with reference to matters aforesaid or any of them or by reasons of any other act or forbearance or other acts of omission or commission on your part or any other indulgence shown by you or by any other matter or thing whatsoever which under the law would, but for this provision have the effect of relieving our bank from its obligation under this guarantee.

6. We also agree that you shall be entitled at your option to enforce this guarantee against our bank as a principal debtor, in the first instance, notwithstanding any other security or guarantee that you may have in relation to "the Vendor's" liabilities in respect of the premises
7. This guarantee shall not be affected by any change in the constitution of our Bank or "the Vendor" or for any other reason whatsoever.
8. Any claim / extension under the guarantee can be lodge-able at outstation banks or at Mumbai branch and claim will also be payable at Mumbai Branch (to be confirmed by Mumbai Branch by a letter to that effect in case BG is from the branch outside Mumbai).
9. Notwithstanding anything herein contained, our liability under this guarantee is limited to Rs. _____ (Rupees _____) only and the guarantee will remain in force upto and including _____ (Date) and shall be extended from time to time for such period or period as may be desired by "the Vendor".
10. Unless a demand or claim under this guarantee is received by us in writing within one months from _____ (expiry date) i.e. on or before _____ (claim period end date), we shall be discharged from all liabilities under this guarantee thereafter.

Dated at _____ this _____ day of _____ 20__

Bank's rubber stamp

1. Banks full address

Designation of Signatory

2. Bank official number

| | | |
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ANNEXURE-C

PROFORMA FOR “NO DEMAND CERTIFICATE” BY ASSOCIATE

(On Company's Letter head or with Company Seal)

(To be submitted by the Associate to TPNODL Accounts Department at the time of receipt of full and final payment)

(Certificate No. CCP/002)

Name of the Project Order/

Contract No.

Dated

Name of the Associate Scheme

No. / Job No.

We, M/s. _____ (Associate) do hereby acknowledge and confirm that we have received the full and final payment due and payable to us from TPNODL, in respect of our aforesaid Order No _____ dated _____ including amendments, if any, issued by TPNODL to our entire satisfaction and we further confirm that we have no claim whatsoever pending with TPNODL under the said contract / W.O.

Notwithstanding any protest recorded by us in any correspondence, documents, measurement books and / or final bills etc., we waive all our rights to lodge any claim or protest in future under this contract.

We are issuing this “NO DEMAND CERTIFICATE” in favour of TPNODL, with full knowledge and with our free consent without any undue influence, misrepresentation, coercion etc.

Place

Name

(Company Seal)

| | | |
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ANNEXURE-D

**PROFORMA FOR APPLICATION FOR ISSUANCE OF CONSOLIDATED TDS
CERTIFICATE**

To be printed on the letterhead

To,
TPNODL Limited,
Bhubaneswar

Sub: Application for issuance of Consolidated TDS Certificate for the FY _____

Dear Sir,

I / we hereby request / authorize you to issue me / us a consolidate TDS Certificate for the financial year _____ against tax deducted at source by you from my / our payments / bills during the said year from time to time under Chapter XVII – B of the Income Tax Act, 1961. For and on behalf of

Signature

Name

Address

Contact No. (Land Line)
(Mobile)

PAN #

Assessing authority

ATTACH THE COPY OF PAN CARD

| | | |
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ANNEXURE-E

BUSINESS ASSOCIATE FEEDBACK FORM

With an objective to improve our internal processes and systems, and serve you better, we solicit your valuable feedback & suggestions. It is estimated that it will take about 10 minutes to complete this survey. We assure you that your feedback shall be kept confidential. Please send the duly filled feedback form in the "TPNODL addressed - attached envelop"

You are associated with us as

- OEMs Service Contractor Material Suppliers Material & Manpower Supplier

You are associated with us for

- Less than 1 year More than 1 year but less than 3 years More than 3 years

Your office is located at

- Bhubaneswar Within 200 kms from Bhubaneswar More than 200 kms from Bhubaneswar

Your nearly turnover with TPNODL

- Less than 25 Lacs 25 Lacs to 1 Crore More than 1 Cr.

Additional Information

| | |
|--------------------------|--|
| Your Name | |
| Your Designation | |
| Your Organization | |
| Contact Nos. | |
| Email | |

We once again thank you for your participation in this survey. Please spare 10 minutes to give your feedback on following pages (Section A to E)

| | | |
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SECTION – A

(Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement).

| S. No. | Parameters | 1 | 2 | 3 | 4 | 5 | Remarks/ Suggestion |
|--------|--|--------------|-----------------------|-------------------|---------------------|-------------|------------------------|
| | | Do Not Agree | Slightly in Agreement | In Fair Agreement | Mostly in Agreement | Fully Agree | |
| 1 | You receive all relevant queries / tenders from us in timely manner. | | | | | | |
| 2 | We provide you enough lead time to respond to our queries / tenders. | | | | | | |
| 3 | We provide you adequate support (drawings, documents, clarifications, briefing etc.) to enable you meet our requirements. | | | | | | |
| 4 | All following elements of our contract / purchase order are rational : | | | | | | |
| 4.1 | Scope of Work | | | | | | |
| 4.2 | Delivery / Execution Schedule | | | | | | |
| 4.3 | Payment Terms | | | | | | |
| 4.4 | Liquidated Damages | | | | | | |
| 4.5 | Performance Guarantee | | | | | | |
| 5 | Our purchase orders / contracts are simple, specific & easy to understand | | | | | | |
| 6 | TPNODL demonstrate willingness to be flexible in administration of Contract / Purchase Order | | | | | | |
| 7 | We provide timely responses / clarifications to your queries | | | | | | |
| 8 | TPNODL representative you interact / coordinate with is adequately empowered to support you in meeting contractual obligations | | | | | | |
| 9 | TPNODL provide you all necessary infrastructure support for timely and quality completion of work (including AMC) | | | | | | |
| 10 | TPNODL Engineer-in-Charge timely certifies the jobs executed/ material supplied | | | | | | |
| 11 | TPNODL Engineer-in-Charge efficiently supervises the job execution for timely completion of job | | | | | | |
| 12 | BIRD (Bill Inward Receipt Desk) initiative has improved payment disbursement process | | | | | | |

| S. No. | Parameters | 1 | 2 | 3 | 4 | 5 | Remarks/ Suggestion |
|--------|--|--------------|-----------------------|-------------------|---------------------|-------------|------------------------|
| | | Do Not Agree | Slightly in Agreement | In Fair Agreement | Mostly in Agreement | Fully Agree | |
| 13 | Our approach for Inspection and Quality Assurance effective to expedite project completion? | | | | | | |
| 14 | TPNODL never defaults on contractual terms | | | | | | |
| 15 | In TPNODL Contracts closure is done within set time limit | | | | | | |
| 16 | Our material receiving procedures are well defined and efficiently deployed to reduce mutual inconvenience | | | | | | |
| 17 | Bank Guarantees are released in time bound manner | | | | | | |
| 18 | Our processes related to payment / account settlement are effective. | | | | | | |
| 19 | You get payments on time | | | | | | |
| 20 | TPNODL Employees follow Ethical behaviour | | | | | | |

| | | |
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SECTION – B

SECTION – B (Please rate the following parameters on a scale of 1 to 5, where 1 - Minimum; 5 - Maximum)

| S. No. | Parameters | 1 | 2 | 3 | 4 | 5 | Remarks/ Suggestion |
|--------|--|---|---|---|---|---|------------------------|
| 1 | How do you rate courtesy/ empathy/ attitude level and warmth of TPNODL employees you interact with from following team? | | | | | | |
| 1.1 | Project Engineering | | | | | | |
| 1.2 | District / Zones | | | | | | |
| 1.3 | Projects/HOG (TS &P) | | | | | | |
| 1.4 | Inspection & Quality Assurance | | | | | | |
| 1.5 | Stores | | | | | | |
| 1.6 | Metering & Billing | | | | | | |
| 1.7 | Accounts / Finance | | | | | | |
| 1.8 | Administration | | | | | | |
| 1.9 | IT & Automation | | | | | | |
| 2 | How would you rate TPNODL in comparison to your other clients in terms of fairness of treatment and transparency with its Business Associates? | | | | | | |
| 3 | How would you rate TPNODL in comparison to your other clients in terms of processes and systems to manage partnership with its Business Associates | | | | | | |
| 4 | How would you rate TPNODL in comparison to your other clients in terms of building long term & mutually relationship with its Business Associates | | | | | | |

SECTION – C

Please √ mark in the relevant box and give your remarks / suggestions / information for our improvement.

| S. No. | Parameters | Certainly No | Probably No | Certainly Yes | Probably Yes | Remarks/ Suggestion |
|--------|---|--------------|-------------|---------------|--------------|------------------------|
| 1 | Based on your experience with TPNODL, would you like to continue your relationship with TPNODL? | | | | | |
| 2 | If someone asks you about TPNODL, would you talk "positively" about | | | | | |

| | | | | | | |
|---|---|--|--|--|--|--|
| | TPNODL? | | | | | |
| 3 | Would you refer TPNODL name to others in your community, fraternity and society as a professional & dynamic organization? | | | | | |

SECTION - D

If we ask you to rate us on a scale of 1 to 10, how will you rate TPNODL, that truly represents your overall satisfaction with us (please tick appropriate box) -

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|

SECTION - E

Please ✓ mark in the relevant box and give your remarks / suggestions / information for our improvement.

Please spare your thoughts for TPNODL's improvement in particular areas of weaknesses, particularly relating to some great practices, attitudes that you have seen elsewhere in Indian and International Organizations, which you recommend TPNODL to adopt. Please give your valuable salient recommendations.

Please spare your thoughts for TPNODL's improvement in particular areas of major concerns for you. We also welcome your suggestions to adopt any best practices, attitudes that you

| Recommendation | <i>Please tick (✓) your top 5 expectations out of the following 10 points listed below -</i> | |
|---|---|--|
| (Please list down improvement you expect from TPNODL) | <i>Timely payment</i> | |
| 1 | <i>Flexibility in Contracts/PO</i> | |
| | <i>Clarity in PO,s & Contracts</i> | |
| 2 | <i>Timely response to quarries</i> | |
| | <i>Timely certification of works executed</i> | |
| 3 | <i>Clarity in Specs, drawings, other docs etc.</i> | |
| | <i>Adequate information provided on website for tender notification, parties qualified etc.</i> | |
| 4 | <i>Timely receipt of material at site for execution</i> | |
| | <i>Performance Guarantee/EMD released in time</i> | |

| | | |
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| | |
|---|---|
| 5 | <i>Inspection & quality assurance support for timely job completion</i> |
|---|---|

We thank you for your time and courtesy!!

ANNEXURE-F

ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

(To be signed and stamped by the bidder prior to participation in the auction event)

In a bid to make our entire procurement process more fair and transparent, TPNODL intends to use the reverse auctions through SAP-SRM tool as an integral part of the entire tendering process. All the bidders who are found as technically qualified based on the tender requirements shall be eligible to participate in the reverse auction event.

The following terms and conditions are deemed as accepted by the bidder on participation in the bid event:

1. TPNODL shall provide the user id and password to the authorized representative of the bidder. (Authorization Letter in lieu of the same shall be submitted along with the signed and stamped Acceptance Form).
2. TPNODL will make every effort to make the bid process transparent. However, the award decision by TPNODL would be final and binding on the supplier.
3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of TPNODL, bid process, bid technology, bid documentation and bid details.
4. The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
5. In case of bidding through Internet medium, bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, internet response issues, software or hardware hangs, power failure or any other reason shall not be the responsibility of TPNODL.
6. In case of intranet medium, TPNODL shall provide the infrastructure to bidders. Further, TPNODL has sole discretion to extend or restart the auction event in case of any glitches in infrastructure observed which has restricted the bidders to submit the bids to ensure fair & transparent competitive bidding. In case an auction event is restarted, the best bid as already available in the system shall become the start price for the new auction.
7. In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder as a part of the tender shall be considered as the bidder's final no regret offer. Any offline price bids received from a bidder in lieu of non-participation in the auction event shall be out rightly rejected by TPNODL.
8. The bidder shall be prepared with competitive price quotes on the day of the bidding event.
9. The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR at TPNODL site.
10. The prices submitted by a bidder during the auction event shall be binding on the bidder.
11. No requests for time extension of the auction event shall be considered by TPNODL.
12. The original price bids of the bidders shall be reduced on pro-rata basis against each line item based on the final all inclusive prices offered during conclusion of the auction event for arriving at Contract amount.

Signature & Seal of the Bidder

| | | |
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ANNEXURE-G

To,

DGM (Finance)
 TPNODL Limited
 Bhubaneswar

Sub: e-Payments through National Electronic Fund Transfer (NEFT) OR Real Time Gross Settlement System (RTGS)

Dear Sir,

We request and authorize you to affect e-payment through NEFT/RTGS to our Bank Account as per the details given below:-

Vendor Code :

Title of Account in the Bank :

Account Type :

(Please mention here whether account is Savings/Current/Cash Credit)

Bank Account Number :

| | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

Name & Address of Bank :

Bank Contact Person's Names :

Bank Tele Numbers with STD Code :

Bank Branch MICR Code :

| | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

(Please enclose a Xerox a copy of a cheque. This cheque should not be a payable at par cheque)

Bank Branch IFSC Code :

| | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

(You can obtain this from branch where you have your account)

Email Address of accounts person: :
 (to send payment information)

| | | |
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Name of the Authorized Signatory: _____ :

Contact Person's Name:

Official Correspondence Address:

We confirm that we will bear the charges, if any, levied by our bank for the credit of NEFT/RTGS amounts in our account. Any change in above furnished information shall be informed to TPNODL well in time at our own. Further, we kept TPNODL indemnified for any loss incurred due to wrong furnishing of above information.

Thanking you,

For _____

(Authorised Signatory)

(Signature with Rubber Stamp)

Certification from Bank:

We confirm that we are enabled for receiving NEFT/RTGS credits and we further confirm that the account number (specify Bank a/c no.) of (Please mention here name of the account holder), the signature of the authorised signatory and the MICR and IFSC Code of our branch mentioned above are correct.

This also is certified that the above information is correct as per Bank record

(Manager's/ Officers Signature under Bank Stamp)

| | | |
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ANNEXURE-H
VENDOR APPRAISAL FORM

| | | | |
|--|---|---|---|
| TO BE SUBMITTED BY VENDOR (To be filled as applicable) | | | |
| Part A | | | |
| 1.0 | DETAILS OF THE FIRM | | |
| | 1.1 | NAME (IN CAPITAL LETTERS) | |
| | 1.2 | TYPE OF CONCERN (PROPRIETARY) PARTNERSHIP PVT.LTD., PUBLIC LTD. ETC. | |
| | 1.3 | YEAR OF ESTABLISHMENT | |
| | 1.4 | LOCATION OF OFFICE POSTAL ADDRESS | |
| | 1.5 | CONTACT DETAIL OF BA's REPRESENTATIVE NAME E-MAIL ID CELL NO. | |
| | 1.6 | LOCATION OF MANUFACTURING UNITS | : |
| | | i) UNITS 1 | : |
| | | ii) OTHER UNITS | : |
| 2.0 | PRODUCTS / SERVICES BEING OFFERED | | |
| 3.0 | TURNOVER DURING THE LAST 3 YEARS (TO BE VERIFIED WITH THE LATEST PROFIT & LOSS STATEMENT). | | |
| 4.0 | AVALABILITY OF STATUTORY DOCUMENTS I.E. COPY OF PAN CARD | | |
| 5.0 | AVALABILITY OF STATUTORY DOCUMENTS I.E. COPY OF GST REGISTRATION | | |
| 6.0 | APPLICABILITY UNDER MSME CERTIFICATION | | |
| 7.0 | BA BELONGS TO AA COMMUNITY (SC/ST) | | |
| 8.0 | DOCUMENTS VERIFYING ADDRESS PROOF (SUPPORTED BY ANY GOVT. ISSUED DOCUMENT) | | |

| | | | |
|-------------|--------------------|---|---|
| 9.0 | TECHNICAL | | |
| | 9.1 | NO.OF DESIGN ENGINEERS (INDICATE NO.OF YEARS EXPERIENCE IN RELATED FIELDS) | : |
| | 9.2 | NO.OF DRAUGHTSMEN | : |
| | 9.3 | COLLABORATION DETAILS (IF ANY) | : |
| | | 9.3.1 DATE OF COLLABORATION | : |
| | | 9.3.2 NAME OF COLLABORATOR | : |
| | | 9.3.3 RBI APPROVAL DETAILS | : |
| | | 9.3.4 EXPERIENCE LIST OF COLLABORATOR | : |
| | | 9.3.5 DURATION OF AGREEMENT | : |
| | 9.4 | AVAILABILITY OF STANDARDS / DESIGN PROCEDURES / COLLABORATOR'S / DOCUMENTS (CHECK WHETHER THESE ARE LATEST/CURRENT) | : |
| | 9.5 | TECHNICAL SUPPORT, BACK-UP GUARANTEE, SUPERVISION, QUALITY CONTROL BY COLLABORATOR (WHEREVER ESSENTIAL). (THIS CLAUSE IS RELEVANT WHEN VENDOR'S EXPERIENCE IS INADEQUATE) | : |
| | 9.6 | QUALITY OF DRAWINGS | : |
| 10.0 | MANUFACTURE | | |
| | 10.1 | SHOP SPACE, LAYOUT LIGHTING, VENTILATION, ETC. | : |
| | 10.2 | POWER (KVA) | : |
| | | MAINS INSTALLED | : |
| | | UTILISED | : |
| | | STANDBY POWER SOURCE | : |
| | 10.3 | MANUFACTURING FACILITIES (ATTACH LIST OF EQUIPMENTS AS APPLICABLE) | : |
| | | 10.3.1 MATERIAL HANDLING | : |
| | | 10.3.2 MACHINING | : |
| | | 10.3.3 FABRICATION | : |

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|-------------|---------------------------------------|---|---|
| | | 10.3.4 HEAT TREATMENT | : |
| | | 10.3.5 BALANCING FACILITY | : |
| | | 10.3.6 SURFACE TREATMENT PRIOR TO PAINTING/ COATING, POLISHING, PICKLING, PASSIVATION, PAINTING, ETC. | : |
| | 10.4 | SUPERVISORY STAFF | : |
| | 10.5 | ADEQUACY OF SKILLED LABOURS (MACHINISTS, WELDERS, ETC.) | : |
| | 10.6 | NO. OF SHIFTS | : |
| | 10.7 | TYPE OF MATERIAL HANDLED (SUCH AS CS, SS, ETC.) | : |
| | 10.8 | WORKMANSHIP | : |
| | 10.9 | MATERIAL IN STOCK AND VALUE | : |
| | 10.10 | TRANSPORT FACILITIES | : |
| | 10.11 | CARE IN HANDLING | : |
| 11.0 | INSPECTION / QC / QA / TESTING | | |
| | 11.1 | NUMBER OF PERSONNEL (INDICATE NO.OF YEARS OF EXPERIENCE) | : |
| | 11.2 | INDEPENDENCE FROM PRODUCTION | : |
| | 11.3 | AVAILABILITY OF PROCEDURAL WRITE UP/QUALITY PLAN | : |
| | 11.4 | INCOMING MATERIAL CONTROL AND DOCUMENTATION | : |
| | 11.5 | RELIABILITY/REPUTATION OF SUPPLY SOURCES | : |
| | 11.6 | STAGE INSPECTION AND DOCUMENTATION | : |
| | 11.7 | SUB-ASSEMBLY & DOCUMENTATION | : |
| | 11.8 | FINAL INSPECTION AND DOCUMENTATION | : |
| | 11.9 | PREPARATION OF FINAL DOCUMENTATION PACKAGE | : |
| | 11.10 | TYPE TEST FACILITIES | : |
| | 11.11 | ACCEPTANCE TEST FACILITIES | : |

| | | |
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|------------------------------------|-------|--|---|
| | 11.12 | CALIBRATION OF INSTRUMENTS AND GAUGES (WITH TRACEABILITY TO NATIONAL STANDARDS) (ATTACH LIST) | : |
| | 11.13 | STATUTORY APPROVALS LIKE BIS, IBR, ETC.(AS APPLICABLE) | : |
| | 11.14 | SUB-VENDOR APPROVAL SYSTEM AND QUALITY CONTROL | : |
| | 11.15 | DETAILS OF TESTS CARRIED OUT AT INDEPENDENT RECOGNISED LABORATORIES | : |
| | | i) FURNISH LIST OF TESTS CARRIED OUT AND THE NAME OF THE LABORATORY WHERE THE TESTS WERE CONDUCTED | : |
| | | ii) CHECK AVAILABILITY OF CERTIFICATES AND REVIEW THESE WHEREVER POSSIBLE | : |
| 12.0 | | EXPERIENCE (INCLUDING CONSTRUCTION / ERECTION / COMMISSIONING) TO BE FURNISHED IN THE FORMAT INDICATED IN APPENDIX) | : |
| 13.0 | | SALES, SERVICE AND SITE ORGANISATIONAL DETAILS | : |
| 14.0 | | CERTIFICATE FROM CUSTOMERS (ATTACH COPIES OF DOCUMENTS) | : |
| 15.0 | | POWER SITUATION | : |
| 16.0 | | LABOUR SITUATION | : |
| 17.0 | | APPLICABILITY OF SC/ST RELAXATION (Y/N) IF YES, SUPPORTING DOCUMENTS TO BE ATTACHED | : |
| Part C Supporting Documents | | | |

| | | |
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| | | |
|-------------|--|--|
| 18.0 | <p>DOCUMENTS TO BE ENCLOSED:</p> <ol style="list-style-type: none"> 1. Factory License 2. ISO Certificate 3. Registration of Central Excise 4. Income Tax Clearance. 5. PF Registration 6. ESI Registration 7. Insurance for Workman Compensation Act No. 8. Electrical Contract LIC No. 9. PAN No. 10. GST Registration 11. MSME Certification 12. WC Tax Registration 13. Organogram of Co. having organogram of Design, safety, quality, production and other teams. 14. Details of subscription of BIS, IEC, IEE, ASTM or other. 15. Details of the team in Design, Quality, Safety, Production. 16. List of manufacturing equipment as per Part C. 17. List of calibrated equipment as per Part C. 18. List of clients and order executed in past two years. 19. Complaint escalation matrix. 20. Performance Certificates of same product from Minimum two utilities. 21. e-Payment Form as per enclosed Annexure-G | |
|-------------|--|--|

*** Classification of BAs under SC/ST shall be governed under following guidelines:**

- **Proprietorship/ Single Ownership Firm:** Proprietor of the firm should be from SC/ST community. Governing document shall be Proprietorship Deed.
- **Partnership Firm:** Only such firms shall qualify which have SC/ST partners holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Partnership Deed.
- **Private Limited Company:** Only such firms shall qualify which have SC/ST directors holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).
- The relaxation available for BAs under SC / STs shall be as per GCC for Tender Fees, EMD, PBG and Turnover criteria.

NOTE: Certification from SC/ST Commission shall be required for deciding upon SC/ST status of a person.

Annexure-G (e-Payment detail form) must be filled by Associate along with this form.

| | | |
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ANNEXURE-I
MANUFACTURER AUTHORIZATION FORM

(To be submitted on OEM's Letter Head)

Date:

Tender Enquiry No.:

To,
Chief (Procurement & Stores)
TPNODL Limited,
Mumbai

Sir,

WHEREAS M/s. *[name of OEM]*, who are official manufacturers of having factories at *[address of OEM]* do hereby authorize M/s *[name of bidder]* to submit a Bid in relation to the Invitation for Bids indicated above, the purpose of which is to provide the following Goods, manufactured by us

.....and to subsequently negotiate and sign the Contract.

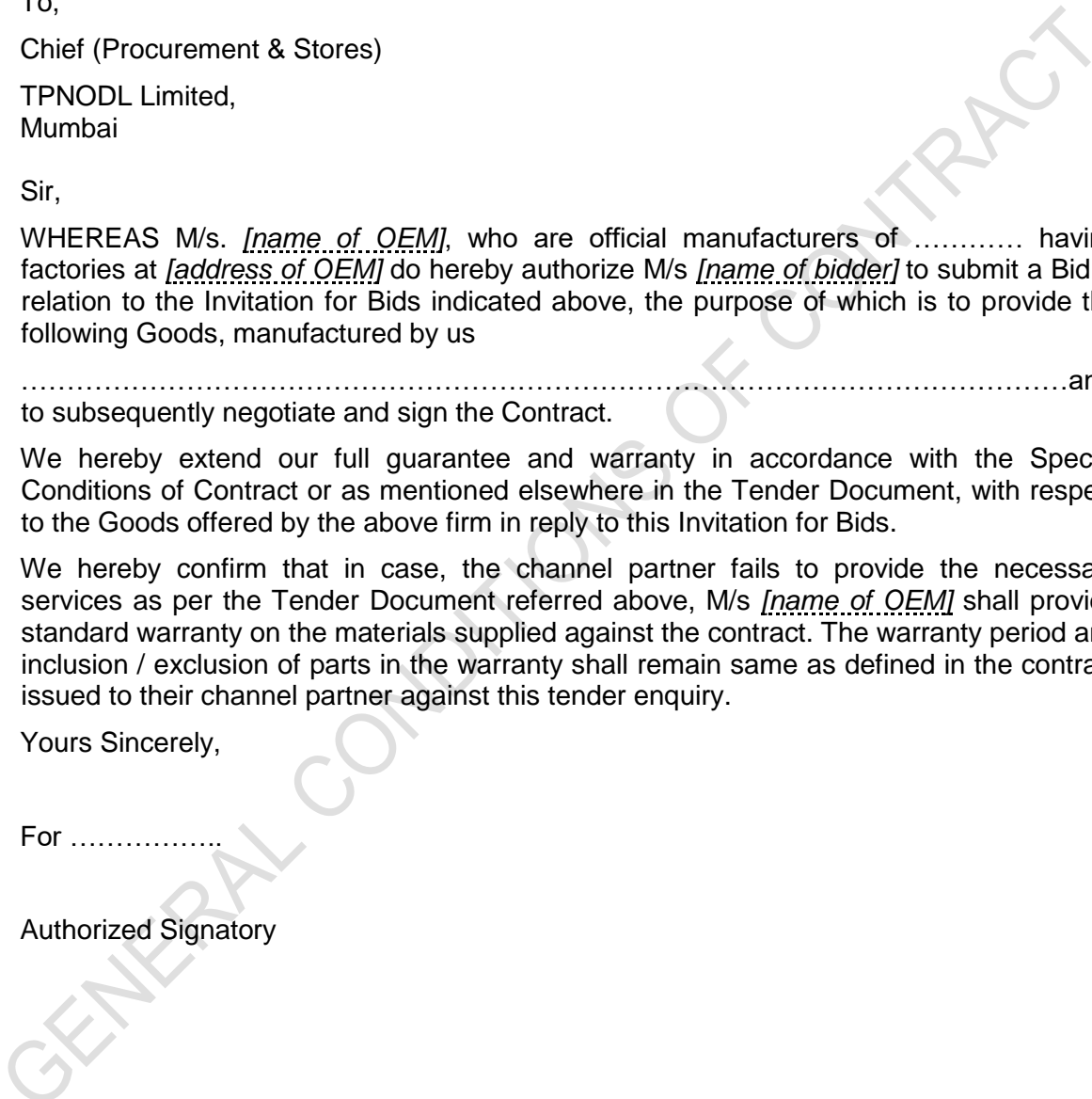
We hereby extend our full guarantee and warranty in accordance with the Special Conditions of Contract or as mentioned elsewhere in the Tender Document, with respect to the Goods offered by the above firm in reply to this Invitation for Bids.

We hereby confirm that in case, the channel partner fails to provide the necessary services as per the Tender Document referred above, M/s *[name of OEM]* shall provide standard warranty on the materials supplied against the contract. The warranty period and inclusion / exclusion of parts in the warranty shall remain same as defined in the contract issued to their channel partner against this tender enquiry.

Yours Sincerely,

For

Authorized Signatory



| | | |
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Annexure-J

TATA CODE OF CONDUCT (TCoC)

Introducing Tata Code of Conduct (TCoC) in GCC, the following clause is proposed for inclusion as per suggestions from Chief Ethics Counsellor -

“TCoC is the overarching policy framework that applies to all TATA Group companies including TPNODL. TCoC provides for stakeholder-wise approach in each of the seven chapters.

The chapter “Our Value Chain Partners” states the policy as follows:

1. We shall select our suppliers and service providers fairly and transparently.
2. We seek to work with suppliers and service providers who can demonstrate that they share similar values. We expect them to adopt ethical standards comparable to our own.
3. Our suppliers and service providers shall represent our company only with duly authorized written permission from our company. They are expected to abide by the Code in their interactions with, and on behalf of us, including respecting the confidentiality of information shared with them.
4. We shall ensure that any gifts or hospitality received from, or given to, our suppliers or service providers comply with our company’s gifts and hospitality policy.
5. We respect our obligations on the use of third party intellectual property and data.

To effectively implement TCoC, there is a 3-tier framework comprising of Ethics Management Apex Team headed by the CEO, who is also the Principal Ethics Officer (PEO), TPNODL; Locational Ethics Counsellors (LECs) who cover various locations/offices of TPNODL; and LECs are assisted by 4-5 Ethics Champions (ECs).

In case any Ethical Concern is faced during the course of your business dealings with TPNODL, one may utilize any one or more of the following avenues:

1. Ethics Portal on website – www.tpnodl.com
2. Ethics Box
3. IVRS No. 19124
4. Locational Ethics Counsellor (LEC)
5. **Third Party Ethics Helpline – 1800-22-7697 (Toll Free) ***
6. Chief Ethics Counsellor

TPNODL is committed to follow Core Values and Core Principles mentioned in TCoC, cited below, in carrying out various activities as well as in discharge of bi-lateral and multi-lateral obligations involving other entities/organizations:

Core Values:

All six core values are already mentioned in GCC.

Core Principles:

1. **Zero tolerance to bribery or corruption** in any form.

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2. Committed to **good corporate citizenship**
3. Contribute to the **economic development of the communities** of the countries & regions we operate in.
4. No compromise on **Safety**
5. Our conduct shall be **fair & transparent**
6. Respect the **human rights & dignity** of our stakeholders
7. **No unfair discrimination** of any kind
8. Statements made to stakeholders shall be **truthful** & made in **good faith**
9. Not engage in any restrictive or **unfair trade practice**
10. Provide avenues for our stakeholders to **raise concerns in good faith**
11. Environment **free from fear** of retribution to deal with concerns that are raised
12. Expect the leaders to be **role model**
13. **Comply with the laws** of the countries in which we operate

Gift Policy:

Principles for acceptance of gifts/benefits –

A gift or benefit may be accepted only if it complies with all of the following principles:

- ✓ it does not influence,
- ✓ does not have the potential to influence, an employee in such a way as to compromise or appear to compromise integrity and impartiality
- ✓ does not create a conflict of interest or perception of conflict of interest;

Principles for non-acceptance of gifts/benefits -

The gift or benefit may not be accepted or given if any of the following principles apply:

- ✓ causes the recipient or donor **to act in partial manner** in the course of duty
- ✓ apprehension of the recipient becoming **obligated to the donor**
- ✓ it is **not offered openly**
- ✓ if is an **offer of money** or something readily convertible to money (e.g. Shares)

Violation –

1. Not abiding with this policy would constitute violation of “Our Employees” Stakeholder group Clause “Gifts and Hospitality” of the Tata Code of Conduct (TCoC) 2015. Prompt action will be taken against violations.
 2. Any deviation from this policy must be supported by appropriate rationale and must be duly approved by CEO who is also the Principal Ethics Officer. In any case, in dealing with such deviations, the spirit of the TCoC should in no case be compromised.
2. If it is determined that an employee / associate has violated this policy, appropriate action including termination of the employee’s / associate’s employment or association with TPNODL may be decided upon.



TP Northern Odisha Distribution Ltd.

TECHNICAL SPECIFICATION FOR 11 KV AND 33 KV ISOLATORS

1. SCOPE

This specification provides for design, manufacture, testing at manufactures works, inspection, packing and delivery of outdoor station type 12kV and 36kV (Local) manual and motor operating mechanism, Horizontal Centre Break (HCB), 3 pole gang motor operated isolator with or without earth switch.

Air break disconnects (Isolators) with/without earthing blades and complete in all respect with bi-metallic connectors and other accessories and auxiliary equipment for installations in various substations. Operating mechanism, fixing details etc. shall be as described herein.

2. SERVICE CONDITIONS

The Isolators to be supplied against this Specification shall be suitable for satisfactory continuous operation under the following climatic conditions.

| | | |
|----|---|---|
| 1 | Location | Balasore, Bhadrak, Jajpur, Keonjhar, Mayurbhanj |
| 2 | Maximum ambient air temperature (°C) | 50 |
| 3 | Minimum ambient air temperature (°C) | 2 |
| 4 | Maximum average daily ambient air temperature (°C) | 40 |
| 5 | Maximum yearly weighted average ambient temperature(°C) | 32 |
| 6 | Maximum altitude above mean sea level (Metres) | 1000 |
| 7 | Maximum Humidity | 93% |
| 8 | Average number of thunderstorm days | 45->50 |
| 9 | Average numbers of dust storms per annum | 10 |
| 10 | Maximum rainfall/annum | 3500 mm |
| 11 | Average rainfall | 2280 mm |
| 12 | Wind Pressure | 97.8 Kg/Sq.mm |
| 13 | Altitude above MSL | 100 m to 1000 m |
| 14 | Seismic Level | 0.24g to 0.48g |

Note:

The equipment shall generally be for use in moderately hot and humid tropical climate, conducive to rust and fungus growth unless otherwise specified.

3. SYSTEM CONDITIONS

The isolators shall be suitable for outdoor installation with 3-phase 50 Hz, 11 kV/33kV systems and they should be designed suitable for service under fluctuations in supply voltage up to $\pm 12\%$. Permissible under Indian Electricity Supply Act and rules made there under.

4. STANDARDS

The isolators and isolator-cum-earthling switches shall comply with the requirements of IS 9921 (as amended up to date) and the latest edition of IEC 62271-102 (IEC 60129). The Insulators shall comply with the requirement of latest edition of IS 2544/1973 and IEC 60168/1988 (as amended up to date)

| Sl. No. | Standard No. | Title |
|---------|----------------------------|---|
| | IS 9921 (Part 1 to 4) | Alternating Current Disconnectors (Isolators) and Earthing Switches for Voltages Above 1 000 V - Part I |
| | IEC 62271-102 (IEC/ 60129) | Alternating current disconnectors and earthing switches |
| | IEC 62271-1 (IEC 60694) | High-voltage switchgear and control gear - Part 1: Common specifications |
| | IS 2544/ IEC 60168 | Porcelain post insulators for systems with nominal voltage greater than 1000 Volts |
| | IS 5350 | Dimensions of Indoor and Outdoor Porcelain Post Insulators and Post Insulator Units for Systems with Nominal Voltages Greater than 1000 V |
| | IS 2629 | Recommended Practice for Hot-Dip Galvanizing of Iron and Steel |
| | IS 4736 | Hot-dip Zinc Coatings on Mild Steel Tubes |
| | IS 4759 | Hot-dip zinc coatings on structural steel and other allied products |
| | IS 6745 | Method for determination of mass of zinc coating on zinc coated iron and steel articles |
| | IS 2633 | Methods for testing uniformity of coating of zinc coated articles |
| | IS 9530/1980 | Recommended practice for silver plating |
| | IS 5925/1970 | Recommended practice for silver plating for general engineering purposes |
| | BS 2816/1964 | Testing of silver plating thickness |

| | | |
|--|--------------|---|
| | IS 6735/1994 | Spring lock washers |
| | IS 2016 | Plain washers |
| | IS 1161 | Steel tubes for structural purposes |
| | IS 1239 | GI pipe('B' class or Medium class) |
| | IS 2147 | Degree of protection provided for enclosures for low voltage control gear |
| | IS:4691 | Degree of protection provided by enclosures for rotating electrical machinery |
| | IS: 5561 | Electrical Power Connectors |

5. KEY TECHNICAL PARAMETERS

The equipment covered in this specification shall meet the technical requirements listed below. The Isolator must be Double Break, centre pole rotating type

| Sl. No. | Parameter | Unit | Requirements for (33kV) | Requirements for (11kV) |
|---------|---|---------|-------------------------|-------------------------|
| 1 | Rated Freq. | Hz. | 50 | 50 |
| 2 | System Neutral Earthing | | Solidly earthed | Solidly earthed |
| 3 | No. of phase(poles) | No. | 3 | 3 |
| 4 | Temp. rise | Deg. C | As per standards IS/IEC | As per standards IS/IEC |
| 5 | Safe duration of overload | Minutes | | |
| | a) 150 % of rated current | | 5 | 5 |
| | b) 120 % of rated current | | 30 | 30 |
| 6 | Rated voltage | KV rms | 36 | 12 |
| 7 | Type of isolator (AB) | | DBCR | DBCR |
| 8 | Rated normal current | Amps. | 1250 | 1250 |
| 9 | Rated short time withstand current for 3 second | KA rms | 25 | 25 |
| 10 | Rated peak current | KA peak | 63 | 63 |
| 11 | Rated short circuit make current | KA peak | 63 | 63 |
| 12 | Derating factor | | unity | Unity |
| 13 | Basic Insulation Level | | | |
| | 1) Lightning Impulse withstand voltage | | | |

| | | | | |
|---------|---|---------|-------------------------|-------------------------|
| | a) Pole to earth & between poles | KV peak | 170 | 75 |
| | b) Across isolating distance | KV peak | 195 | 85 |
| | 2) Rated power freq. withstand voltage | | | |
| | a) Pole to earth & between poles | KV rms | 70 | 28 |
| | b) Across isolating distance | KV rms | 80 | 32 |
| 14 | Min. creepage distance (The protected creepage distance shall not be less than 50% of total) | mm | 900 | 300 |
| 15 | Phase to phase spacing for installation | mm | 1500 | 900 |
| 16 | Min. clearances | mm | | |
| | a) Phase to earth | | 430 | AS per IE rule |
| | b) Between rotating post and fixed post on | | 485 | AS per IE rule |
| Sl. No. | Parameter | Unit | Requirements for (33kV) | Requirements for (11kV) |
| | one phase | | | |
| 17 | Height of centre line of terminal pad above ground level | mm | 3700 | 3700 |
| 18 | <p>Special Requirements:</p> <p>Isolator main switch (MS) shall be required to make or break the line charging current when no significant change in voltage occurs across the isolating distance on account of make or break.</p> <p>The isolator required is not with “Turn and twist mechanism”. It must be rotating type.</p> | | | |

6. GENERAL TECHNICAL REQUIREMENTS

6.1. TYPE & RATING

Isolators shall have three posts per phase, triple pole single throw, gang operated out-door type silver plated contacts with horizontal operating blade and isolators posts arranged vertically. The isolators will be double break type. Rotating blade feature with pressure relieving contacts is necessary i.e. the isolator shall be described in detail along- with the offer. All isolators shall operate through 90 degree from their fully closed position to fully open position, so that the break is distinct and clearly visible from the ground level.

The equipment offered by the tenderer shall be designed for a normal current rating of 400A, 630 A for 11 KV & 800 A, 1250 A for 33 KV suitable for continuous service at the system voltage specified herein. The isolators are not required to operate under load but they must be called upon to handle magnetization currents of the power transformers and capacitive currents of bushings, bus-bars connections, very short lengths of cables and current of voltage transformers.

The rated insulation strength of the equipment shall not be lower than the levels specified in IS 9921 IEC publication No. IEC 62271-102 (IEC 60129), which are reproduced below:

| Standard declared voltage kv/rms | Rated voltage of the Isolator | Standard withstand positive kV (peak) | Impulse Voltage polarity | One minute power frequency withstand voltage KV (RMS) | |
|----------------------------------|-------------------------------|---------------------------------------|----------------------------|---|----------------------------|
| | | | | Across the isolating distance | To earth and between poles |
| 11 KV | 12 | 85 | To earth and between poles | 32 | 28 |
| 33 KV | 36 | 195 | 170 | 80 | 70 |

The 11 KV and 33 KV isolators are required with post insulators but with mounting structures. The isolators should be suitable for mounting on the Boards standard structures. The isolators shall be supplied with base channels along with fixing nuts, bolts and washers for mounting on the structured.

6.2 TEMPRATURE RISE

The maximum temperature attained by any part of the equipment when in service at site under continues full load conditions and exposed to the direct rays of Sun shall not exceed 45 degree centigrade above ambient temperature.

6.3 ISOLATOR INSULATION

Isolation to ground, insulation between open contacts and the insulation between phases of the completely assembled isolating switches shall be capable of withstanding the dielectric test voltage specified above.

6.4 MAIN CONTACTS

All isolators shall have heavy duty self-aligning and high pressure line type fixed contacts of modern design and made of hard drawn electrolytic copper. The fixed contact should be of reverse loop type. The various parts shall be accordingly finished to ensure inter- changeability of similar components.

The fingers of fixed contacts shall be preferably in two pieces and each shall form the reverse loops to hold fixed contacts. The fixed contacts would be placed in 'c' clamp. The thickness of 'C' clamp shall be adequate. This channel shall be placed on a channel of adequate thickness. This channel shall be welded on an insulator mounting plate of 8mm thickness. The spring of fixed contact shall have housing to hold in place. This spring shall be made of stainless steel with adequate thickness. The pad for connection of terminal connector shall be of Aluminium with thickness not less than 12 mm.

The switch blades forming the moving contacts shall be made from tubular section of hard drawn electrolytic copper having outer diameter not less than 38 mm and thickness 3 mm. These contacts shall be liberally dimensioned so as to withstand safely the highest short circuit and over voltage that may be encountered during service. The surfaces of the contacts shall be rendered smooth and silver plated. The thickness of silver plating shall not be less than 15 microns for 11 KV and 25

microns for 33 KV. In nut shell, the male and female contact assemblies shall be of robust construction and design of these assemblies shall ensure the same.

- a) Electro-dynamic withstands ability during short circuit without any risk of repulsion of contacts.
- b) The current density in the copper parts shall not be less than 2 Amp/sq.mm and aluminium parts shall be less than 1 Amp / sq.mm.
- c) Thermal withstand ability during short circuit.
- d) Constant contact pressure even when the live parts of the insulator stacks are subjected to tensile stresses due to linear expansion of connected bus bar of flexible conductors either because of temperature verification or strong winds.
- e) Wiping action during closing and opening.
- f) Self-alignment assuring closing of the switch without minute adjustment.

The earthing switch should be provided with three sets of suitable type of fixed contacts below the fixed contacts assemblies of the main switch on the incoming supply side and the sets of moving contacts having ganged operation. These contacts shall be fabricated out of electrolytic copper for 33 KV isolators with earth switch and designed to withstand current on the line.

Arcing contacts/Horn: Arcing contacts are not required.

Auxiliary switches : Auxiliary switches are not required

6.5 CONNECTORS

The connectors for 11KV isolator shall be made of Aluminium alloy LM-9 or LM-25 and shall be suitable for Raccoon/Dog ACSR Conductors for 11KV and Wolf conductors for 33 KV with horizontal and vertical take-off arrangement. The details in regard to dimensions, the number of bolts to be provided, material and manufacture shall be furnished by the bidder for owner approval before manufacturing. The groove provided in the connection should be able to accommodate conductor size mentioned above smoothly.

The clamps to be offered should be manufactured by gravity die-casting method only and not by sand casting process. It is necessary that suitable clamps are offered along with the isolator and also it is obligatory to give complete technical particular of clamps along with the drawing, as per details given above and also as per following detail:

- a) The terminal connector shall be manufactured and tested as per IS: 5561.
- b) All castings shall be free from blow holes, surface blisters, cracks and cavities.
- c) All the sharp edges shall be blurred and rounded off.
- d) No part of the clamp shall be less than 12 mm thick.
- e) All current carrying parts shall be designed and manufactured to have minimum contact resistance.
- f) Connectors shall be designed to be corona free in accordance with the requirement of IS: 5561.
- g) All nuts and bolts shall be made of stainless steel only. Bimetallic sleeve/liner shall be 2 mm thick

Wherever necessary, bi-metallic strip of standard quality and adequate dimension shall be used.

6.6 POST INSULATOR

11KV / 33KV insulators shall be of reputed make subject to owner approval. The post insulators for the above 11 KV isolators shall comprise of three numbers 11 KV insulators per stack and 9 such stack shall be supplied with each isolator. Similarly, for 33 KV isolators, two numbers 33 KV insulators per stack and 9 stacks shall be supplied with each isolator. The insulator stack shall conform to the latest applicable Indian or IEC standard and in particulars to the IS; 2544 specification for porcelain post insulators. The porcelain used for manufactures of insulators shall be homogeneous, free from flaws or imperfections that might affect the mechanical or dielectric quality, and they shall be thoroughly vitrified, tough and impervious to moisture. The glazing of the porcelain shall be uniform brown colour, free from glisters, burns and other similar defects. Insulators of the same rating and type shall be interchangeable.

The porcelain and metal parts should be assembled in such a manner that any thermal expansion differential between the metal and the porcelain parts throughout the range of temperature variation shall not loosen the parts or create undue internal stresses which may affect the electrical or mechanical strength and rigidity. Each cap and base shall be of high-grade cast steel or malleable steel casting and they shall be machine faced and smoothly galvanized. The cap and base of the insulators shall be interchangeable with each other.

The tenders shall in variably enclose with the offer, the type test certificate and other relevant technical guaranteed particulars of insulators offered by them. Please note that isolators without type test certificates will not be accepted.

Each 11KV / 33KV Post Insulators used in the isolators should have technical particulars as detailed below:

| Sl.No. | Particulars | 11KV | 33KV |
|--------|--|---|------|
| 1 | Nominal system voltage KV (rms) | 11 | 33 |
| 2 | Highest system voltage KV (rms) | 12 | 36 |
| 3 | Dry P.F. One minute with stand KV (rms) | 35 | 75 |
| 4 | Wet PF one minute withstand KV (rms) | 35 | 75 |
| 5 | P.F. Puncture withstand test voltage KV | 1.3 times the actual dry flash over voltage of the unit | |
| 6 | Impulse voltage withstand test KV (peak) | 75 | 170 |
| 7 | Visible discharge test KV voltage | 9 | 27 |
| 8 | Creepage distance mm (min) | 300 | 900 |
| 9 | Tensile strength in KN | 10 | 16 |
| 10 | Short time current rating for 3 Secs KA | 25 | 25 |

For 33 KV Isolators: In place of 33 KV Post Insulator the composition of 2 units of 22KV Post Insulators per stack complying with the following parameters are acceptable:

| | | |
|---|---------------------------------------|--------|
| a | Nominal system voltage | 33 KV |
| b | Highest system voltage | 36 KV |
| c | Impulse voltage withstand | 170 KV |
| d | Power frequency wet withstand voltage | 75 KV |
| e | Height of stack | 500 mm |
| f | Creepage distance (Minimum) | 900 mm |
| g | Tensile Strength | 30KN |
| h | Bending strength | 4.5KN |

6.7 OPERATING MECHANISM FOR 11KV / 33KV ISOLATORS:

- a) The operating mechanism shall be motor operated as well as manually operated for 33kV and 11kV Class isolator and shall ensure quick and effective operation. The operating mechanism shall be housed in a weather proof outdoor mechanism box near the base of the isolator.
- b) Each isolator/pole of isolator and earth switch shall be provided with a manual operating handle at a height of 1000 mm. (approx.) from the base of isolator support structure so that one man can open or close the isolator with ease in one movement while standing at ground level.
- c) All operating linkages carrying mechanical loads shall be designed for negligible deflection. The isolator and earth switches shall be provided with 'Over Center' device in the operating mechanism to prevent accidental opening due to wind, vibration, short circuit forces or movement of the support structures.
- d) All rotating parts shall be provided with grease packed roller or ball bearings in sealed housings designed to prevent ingress of moisture, dirt or other foreign material. Bearing pressure shall be kept low to ensure long life and ease of operation. Locking pins whenever used shall be rustproof.
- e) Signaling of closed position shall not take place unless it is certain that the movable contacts have reached a position in which rated normal current, peak withstand current and short time withstand current can be carried safely. Signaling of open position shall not take place unless movable contacts have reached a position such that clearance between contacts is at least 80% of the isolating distance.
- f) The position of movable main blade of each isolators and earthing switching shall be indicated by a mechanical indicator at the lower end of the vertical rod shaft for the isolator and earthing switch. The indicator shall be of metal and visible from operating level.
- g) The isolator blades/earth switches shall be in continuous control throughout the entire cycle of operation. The operating rods and pipe shall be rigid enough to maintain control under adverse conditions to withstand all torsional and bending stresses arising from operation. All hinges / movable joints in current carrying parts shall be shunted with flexible copper conductors having adequate length and size to prevent breaking due to repeated operation. Operating rod of main and earth switch shall be pad lockable.

- h)
 - i) The mechanism box shall have neoprene gasket hinged door at front with locking facility. All accessories inside the housing shall be easily accessible.
 - ii) The box shall be suitable for mounting on structure as well as on plinth of adequate height.
 - iii) The Control Cabinet/Operating mechanism box shall be made of 3 mm (min.) thick Aluminum sheet such that it provides adequate rigidity and shall be provided with removable gland plates at the bottom of the box for connection of cables. Space heater with thermostat and switch as well as one 230 Volt combined 5A/15A AC plug with socket and switch shall be provided. Mechanism Box shall have Degree of Protection not less than IP-55 as per IS:13947
 - iv) Cubicle illumination lamp with door switch shall be provided.
 - v) Suitable reduction gear shall be provided between motor and the drive shaft of the isolator. The mechanism shall stop immediately when motor supply is switched off.
 - vi) Manual operation facility (with handle) should be provided with necessary interlock to disconnect motor.
 - vii) Gear should be forged material and suitably chosen (rust free) to avoid bending/jamming on operation after a prolonged non-operation.
- i) Proper arrangement shall be provided for smooth transfer of rotary motion from motor shaft to the insulator along with stoppers to prevent over travel

6.8 PIPES

Tandem pipes operating handle shall be class BIS marked type having atleast 24mm internal diameter for 11KV/33KV isolator. The operating pipe shall also be class B ISI marked with internal diameter of atleast 32 mm and 38 mm for 11 KV and 33KV isolators respectively.

The pipe shall be terminated in to suitable universal type joints between the insulator bottom bearing and operating mechanism.

6.9 BASE CHANNEL

The Isolator shall be mounted on base fabricated from steel channel section of adequate size not less than 75x40x6 mm for 11KV and 100x50x6 mm for 33KV.

To withstand total weight of isolator and insulator and also all the forces that may encounter by the isolator during services, suitable holes shall be provided on this base channel to facilitate it's mounting on our standard structures. The steel channel in each phase shall be mounted in vertical position and over it two mounting plates atleast 8mm thick with suitable nuts and bolts shall be provided for minor adjustment at site.

6.10 CLEARANCES

We have adopted the following minimum clearance for isolators in our system .The bidder should therefore keep the same in view while submitting their offers:

| Description | Centre distance between Poles (Center to Centre) i.e. Phase to Phase clearance | Distance between centre lines of outer posts on same pole |
|----------------|---|--|
| 11 KV Isolator | 75 cm | 60 cm |
| 33 KV Isolator | 12 cm | 96 cm |

7 DUTY REQUIREMENT:

- a) Isolator and earth switches shall be capable of withstanding the dynamic and thermal effect of maximum short circuit current of the system in their closed position. They shall be constructed such that they do not open under influence of short circuit current.
- b) Earth switch can be capable of discharging trapped charges of the respective lines.
- c) Isolator shall be capable of making/breaking normal current with no significant change in voltage occurs across the terminal of each pole of isolator on account of make / break operation.
- d) The isolators shall be capable of making/breaking magnetizing current of 0.7A at 0.15 power factor and capacitive current of 0.7A at 0.15 power factor at rated voltage.
- e) The earth switch wherever provided shall be constructionally inter-locked so that earth switch can be operated only when the isolator is in open condition or vice versa. The constructional interlock shall be built in construction of isolator and shall be in addition to the electrical and mechanical interlocks provided in operating mechanism.
- f) In addition to constructional interlock, isolator and earth switch shall have provision to prevent their electrical and manual operation unless the associated and other interlocking conditions are met. Suitable individual interlocking coil arrangements shall be provided. The interlocking coil shall be suitable for continuous operation from DC supply and within a variation range as stipulated in 'Specific Technical Parameter'.

8. TYPE TESTS

- 8.1 The equipment offered, shall be fully type tested as per the relevant standards. The tenderer shall furnish one set of the type test reports along with the offer. The purchaser reserves the right to demand repetition of some or all the type tests in the presence of purchaser's representative. For this purpose the tenderer may quote unit rates for carrying out each type test.
 - 8.2 If type tests are carried out beyond 5 years, then the offer may be considered for placement of order however, successful bidders have to carry out the said type tests before commencement of the supply at their own expense.
 - 8.3 During the type test the isolator shall be mounted on its own support structure or equivalent support structure and installed with its own operating mechanism to make the type tests representative. Drawing of equivalent support structure if any and mounting arrangements made for type tests shall be furnished for purchaser's approval before conducting the type tests.
 - 8.4 The type tests shall be conducted on the isolator along with approved insulators and terminal connectors.
 - 8.5 Mechanical endurance test shall be conducted on the main switch as well as earth switch on one disconnect of each type.
 - 8.6 The isolators shall be subjected to the following type test in accordance to with IS: 9920. Dielectric test (impulse and one minute) power frequency withstands voltage.
 - a) Temperature rise test
 - b) Rated off load breaking current capacity
 - c) Rated active load breaking capacity
 - d) Rated line charging breaking capacity
 - e) Rated short time current
 - f) Rated peak withstand current
 - g) Mechanical and Electrical Endurance
- The equipment shall be subjected to the following routine test.
- a) Power frequency voltage dry test.
 - b) Measurement of resistance of the main circuit
 - c) Operating test.

The porcelain will have pull out test for embedded component and beam strength of porcelain base.

9. PRE-COMMISSIONING TESTS

Contractor shall carry out following tests as pre-commissioning tests. Contractor shall also perform any additional test based on specialties of the items as per the field instructions of the equipment Supplier or Employer without any extra cost to the Employer. The Contractor shall arrange all instruments required for conducting these tests along with calibration certificates and shall furnish the list of instruments to the Employer for approval.

- (a) Insulation resistance of each pole.
- (b) Manual operation and interlocks.
- (c) Insulation resistance of control circuits and motors.
- (d) Ground connections.
- (e) Contact resistance.
- (f) Proper alignment so as to minimize the vibration during operation to the extreme possible.
- (g) Measurement of operating Torque for isolator and Earth switch.
- (h) Resistance of operating and interlocks coils.
- (i) Functional check of the control schematic and electrical & mechanical interlocks. (j) 50 operations test on isolator and earth switch.

10. PERFORMANCE GUARANTEE:

The equipment shall be guaranteed for satisfactory performance for a period of 66 months from the date of receipt at site in good condition or 60 months from the date of commissioning, whichever is earlier. In case of failure within this period the supplier will make good the faulty equipment at no extra cost to the purchaser.

11. DOCUMENTATION:

- I. All drawings shall conform to international standards. All drawings shall be "A3" size only.
- b) All dimensions and data shall be in System International units.
List of drawings and documents:
- c) The tenderer shall furnish four sets of following drawings along with his offer:
 - i. General outline and assembly drawings of the isolator, operating mechanism, structure, insulator and terminal connector.
 - ii. Sectional views and descriptive details of items such as moving blades, contacts, arms, contact, pressure, contact support, bearing, housing of bearings, bushes, balancing of heights, phase coupling pipes, base plate, operating shaft, guides, swivel joint operating mechanism and its components, etc.
 - iii. Drawings with structure for the purpose of type tests.
 - iv. Name plate.
 - v. Schematic drawing
 - vi. Type test reports in case the equipment has already been type tested.
 - vii. Test reports, literature, pamphlets of the bought out items, and raw material.
- d) The successful tenderer shall, within 10 days from date of LOA get approval of above said drawings from office of CE (Stores), MSEDCL, Mumbai.
- e) Six sets of the type test reports, duly approved by the purchaser, shall be submitted by the supplier for distribution, before commencement of supply. Adequate copies of acceptance and routine test certificates, duly approved by the purchaser, shall accompany the dispatched consignment.
 - I. The manufacturing of the equipments shall be strictly in accordance with the approved

drawings and no deviation shall be permitted without the written approval of the purchaser. All manufacturing and fabrication work in connection with the equipment prior to the approval of the drawing shall be at the supplier's risk.

- II. Approval of drawings/work by purchaser shall not relieve the supplier of his responsibility and liability for ensuring correctness and correct interpretation of the latest revision of applicable standards, rules and codes of practices.

12. INSTRUCTION MANUALS:

Twenty five copies of the erection, operation and maintenance manuals in English shall be supplied for each type of the disconnect one month prior to dispatch of the equipment. The manual shall be bound volume and shall contain all drawings and information required for erection, operation and maintenance of the isolator including but not limited to the following particulars:

- a. Marked erection prints identifying the component parts of the disconnect as shipped with assembly drawings.
- b. Detailed dimensions and description of all auxiliaries.
- c. Detailed views of the insulator stacks, metallic, operating mechanism, structure, interlocks, spare parts etc.

13. SPARES

The tenderer shall furnish in his offer, a list of spares with unit rates for disconnect that may be necessary for maintenance of the isolator for a period of five years. The purchaser reserves the right for selection of items and quantities of these spares to be ordered. The cost of following spares shall be quoted separately.

- a. Insulators
- b. Contacts
- c. Moving blades
- d. Springs
- e. Bearings

In addition list of optional spares may be enclosed.

14. PACKING AND FORWARDING

- 14.1 The equipment shall be packed in crates suitable for vertical/horizontal transport, as the case may be, and suitable to withstand handling during transport and outdoor storage during transit. The supplier shall be responsible for any damage to the equipment during transit, due to improper and inadequate packing. The easily damageable material shall be carefully packed and marked with the appropriate caution symbols. Wherever necessary, proper arrangement for lifting, such as lifting hooks etc. shall be provided, Any material found short inside the packing cases shall be supplied by supplier without any extra cost.

- 14.2 Each consignment shall be accompanied by a detailed packing list containing the following information.

- a. Name of the consignee
- b. Details of consignment
- c. Destination
- d. Total weight of consignment
- e. Sign showing upper/lower side of the crate.
- f. Handling and unpacking instructions
- g. Bill of material indicating contains of each package.

- 14.3 The supplier shall ensure that the packing list and bill of material are approved by the purchaser before dispatch.

GUARANTEED TECHNICAL PARTICULARS OF 33KV & 11KV ISOLATORS

| S. No. | Particulars | 33KV ISOLATORS | 11KV ISOLATORS |
|--------|--|----------------|----------------|
| 1 | Manufacturer's Type/Designation/Installation | | |
| 2 | Manufacturer's Name and works address of Manufacture | | |
| 3 | Standard(s) according to which the isolators are manufactured | | |
| 4 | Type of Disconnecter | | |
| 5 | Maximum design voltage at which the isolator can operate (kV) | | |
| 6 | Rated Frequency (Hz) | | |
| 7 | Rated Voltage (KV) | | |
| 8 | Max. current that can be safely interrupted by the isolator | | |
| | i) Inductive (A & % PF) | | |
| | ii) Capacitive (A & % PF) | | |
| 9 | Continuous current rating | | |
| | i) Nominal (Amps) | | |
| | ii) Under site conditions (Amps) | | |
| 10 | Rated short time withstand current | | |
| | i) For 3 seconds (KA rms) | | |
| | ii) For 1 second (KA rms) | | |
| | iii) Rated peak withstand current (kAp) | | |
| 10 | Milli Volt drop test voltage between : | | |
| 11 | i) Contacts | | |
| | ii) Terminals of each phase | | |
| 12 | Current density at the minimum cross- section of: | | |
| | a) Moving blade (Amps/Sq.mm.) | | |
| | b) Terminal pad (Amps/sq.mm.) | | |
| | c) Male Contacts (Amps/sq.mm.) | | |
| | d) Female Contacts (Amps/sq.mm.) | | |
| | e) Terminal Connector (Amp/sq.mm) | | |
| 13 | Max. Temp. Rise of following current carrying parts when carrying rated current continuously (deg.C) over an ambient of 50 deg.C instead of 40 deg.C mentioned in relevant IS. | | |
| | i) Moving blades | | |
| | ii) Contacts with silver plating | | |
| | iii) Terminal pad. | | |

| | | | |
|----|---|--|--|
| | iv) Bi-metallic terminal connector | | |
| | v) Springs | | |
| 14 | Class (outdoor or indoor) | | |
| 15 | Derating factor for specified site conditions | | |

| | | | |
|----|--|--|--|
| 16 | No. of operations the isolator can make without deterioration of contacts. | | |
| 17 | 15) Insulation levels | | |
| | i) Lightning Impulse withstand voltage (kV peak) | | |
| | a) Phases to Earth | | |
| | b) Isolating Distance | | |
| | ii) Power frequency withstand voltage (kVrms) | | |
| | a) Phases to Earth | | |
| | b) Isolating Distance | | |
| 18 | Minimum clearance in air (mm): | | |
| | i) When switch is closed: | | |
| | a) Between adjacent poles of different phases (centre to centre) | | |
| | b) Between live parts and earth | | |
| | ii) When switch is open: | | |
| | a) Between poles of same phase (centre to centre) | | |
| | b) Between adjacent poles of different phases (centre to centre) | | |
| 19 | Design and Construction | | |
| | i) No. of insulators per pole | | |
| | ii) No. of breaks per pole | | |
| | iii) Type of closing/opening mechanism (Horizontal/Vertical break straight etc.) should be GANG operated through motor | | |
| | iv) Contacts (Male): | | |
| | a) Material and grade | | |
| | b) Dimensions & Cross-sectional area in sq.mm. | | |
| | v) Contacts(Female): | | |
| | a) Material and grade | | |
| | b) Dimensions & Cross-sectional area in sq.mm. | | |
| | vi) Moving Blades: | | |
| | a) Material and grade | | |
| | b) Dimensions & Cross-sectional area in sq.mm. | | |

| | | | |
|--|--|--|--|
| | vii) Terminal pad: | | |
| | a) Material and grade | | |
| | b) Dimensions & Cross-sectional area in sq.mm. | | |
| | viii) Arching horns : | | |
| | a) Material and grade | | |
| | b) Dimensions & Cross-sectional area in sq.mm. | | |
| | ix) Springs | | |
| | a) Material and grade | | |
| | b) Dimensions & Cross-sectional area in sq.mm. | | |
| | x) Contact Support: | | |
| | a) Material, size and length of plate | | |

| | | | |
|--|---|--|--|
| | b) Material and size of plate | | |
| | xi) Rain hood - Material grade and size | | |
| | xii) Nuts and Bolts | | |
| | a) Size, material and grade in live parts | | |
| | b) Size, material and grade in other parts | | |
| | xiii) Insulator base plate | | |
| | Material and size & min. thickness of plate below insulators. | | |
| | xiv) Bearings: | | |
| | a) Make, Type and No. of bearings for: | | |
| | i) Rotating insulator base assembly | | |
| | ii) Operating mechanism | | |
| | iii) Whether lubricating nipple is provided | | |
| | b) Make, and size of bearing housing | | |
| | xv) Size of GI pipes (medium class) used for : | | |
| | a) Down operating pipe (mm) | | |
| | b) Connecting pipe for same phase (mm) | | |
| | c) Connecting Pipe for adjacent poles(mm) | | |
| | xvi) Tandem pipe | | |
| | a) Size class and No. of pipes | | |
| | b) Size of shackle, screw | | |
| | c) No. of bearings/bush and its material and size. | | |
| | xvii) Type of interlock | | |
| | xviii) Type of universal/swived joint | | |
| | a) Between bearing and down pipe | | |

| | | | |
|--|---|--|--|
| | b) Between down pipe and operating mechanism | | |
| | xix) Insulators | | |
| | a) Type. | | |
| | b) No. of units per insulator | | |
| | c) Rating of insulators(KV) | | |
| | d) Height of each insulator stack (mm) | | |
| | e) Bolt circle diameter(mm) | | |
| | f) Tensile strength (kg). | | |
| | g) Compressive strength(Kg.) | | |
| | h) Torsional strength (kg.m.) | | |
| | i) Cantilever strength upright | | |
| | j) Power frequency dry flash- over voltage (KV) rms. | | |
| | k) Power frequency wet flash-over voltage(KV) rms. | | |
| | l) Impulse flash-over voltage (positive wave) (KV) peak. | | |
| | m) Impulse withstand voltage (kV) peak | | |
| | n) Power frequency puncture voltage (KV) rms. | | |
| | o) Visual discharge voltage level (KV) rms. | | |
| | p) Creepage distance : Total(mm) | | |
| | q) Dry arcing distance (mm) | | |
| | xx) Base: | | |
| | a) Size, Nos. & length of steel sections used | | |
| | b) Overall size(mm) | | |
| | c) Total weight (Kgs) | | |
| | xxi) Terminal Connectors: | | |
| | a) Clamp Body: | | |
| | i) Alloy Composition | | |
| | ii) Plating if any | | |
| | iii) Dimension | | |
| | b) Bolts and nuts size | | |
| | i) Alloy composition | | |
| | ii) Tensile strength | | |
| | a) Type of washers used | | |
| | b) Materials of braids | | |
| | c) Temperature rise when carrying rated current at 50 deg.C ambient (deg.C) | | |

| | | | |
|----|---|--|--|
| | d) Weight of each type of clamp (Kg.) | | |
| | xxii) ISOLATOR DRIVES | | |
| | a) Type of Drive Motor (Like AC Squirrel Cage, DC Motor) | | |
| | b) Voltage of Motor Drives | | |
| | c) Provision of Manual Operation (Yes / No) | | |
| | d) Rated auxiliary supply voltage to coil for close & Open Operation | | |
| 20 | Mass of isolator hardware in Kg. | | |
| | A) Without earth blade | | |
| 21 | Type of contacts | | |
| 22 | Nuts & Bolts | | |
| | a) Size, material & grade in live parts | | |
| | b) Terminal connectors. | | |
| | c) Other parts. | | |
| 23 | Locking arrangement of Isolators and earth switch operating mechanism | | |
| 24 | Whether isolator hardware is complete with all accessories | | |
| 25 | Details of type test reports furnished: | | |
| | Item IS:Type test Testing | | |
| | Report No. authority & date | | |
| | i) Isolator | | |
| | ii) Terminal connector | | |
| | iii) Degree of protection | | |
| 26 | List of brought out items | | |
| 27 | List of drawing furnished | | |
| 28 | Marking | | |



TP Northern Odisha Distribution Ltd.

TECHNICAL SPECIFICATION FOR 11 KV AND 33 KV AB Switches

1) SCOPE

This specification provides for manufacture, testing at works and supply of 11KV & 33KV AB switches. The 11KV and 33 KV AB switches shall conform to IS: 9920 (Part-I to IV)

2) AB SWITCHES

The 11KV & 33KV Air Break Switches are required with two poles in each phase. The AB Switches shall be supplied complete with phase coupling shaft, operating rod and operating handle. It shall be manually gang operated and vertically break and horizontal mounting type.

The equipment offered by the bidder shall be designed for a normal current rating of 1250 Amps and for continuous service at the system voltage specified as under:

- | | | | |
|--------------------|---|-------------|---|
| i) 11 KV AB Switch | : | 11KV + 10% | continuous 50 C/s solidly grounded earthed neutral system |
| ii) 33KV AB Switch | : | 33 kV + 10% | -do- |

The length of break in the air shall not be less than 400 mm for 11KV AB Switches and 500 mm for 33 KV AB Switches.

The 11KV & 33KV AB Switches are required with post insulators. The AB switches should be suitable for mounting on the structure. The mounting structure will be arranged by the bidder. However, the AB Switches shall be supplied with base channel for mounting on the structure which will be provided by the owner. The phase to phase spacing shall be 750mm in case of 11KV AB Switches & 1200mm in case of 33KV AB Switches.

3) POST INSULATORS

The complete set of three phase AB Switches shall have stacks of post

insulators. 11KV AB Switches : 3 No. 11KV Post Insulator per

stack

33KV AB Switches : 3 No. 33KV Post Insulator per stack

The post insulators should conform to the latest applicable Indian standards IS: 2544 Specification for Porcelain Post insulator of compact solid core or long rod insulators are also acceptable. Creepage distance should be adequate for highly polluted outdoor atmosphere in open atmosphere. The porcelain used for manufacture of AB Switches should be homogeneous free from flaws or imperfections that might affect the mechanical dielectric quality. They shall be thoroughly vitrified, tough and impervious to moisture. The glazing of the porcelain shall be of uniform brown in colour, free from blisters, burns and other similar defects. Insulators of the same rating and type shall be interchangeable.

The porcelain and metal parts shall be assembled in such a manner that any thermal expansion differential between the metal and porcelain parts through the range of temperature variation shall not loose the parts or create undue internal stresses which may affect the electrical or mechanical strength. Cap and base of the insulators shall be interchangeable with each other. The cap and base shall be properly cemented with insulators to give perfect grip. Excess cementing must be avoided.

Each 11KV & 33KV Post Insulators should have technical particulars as detailed below:

| | | 11 kV | 33 kV |
|------|---|--|-------|
| i | Nominal system voltage kV (rms) | 11 | 33 |
| ii | Highest system voltage kV (rms.) | 12 | 36 |
| iii | Dry Power Frequency one kV minute withstand voltage (rms) in KV | 35 | 75 |
| iv | Wet Power frequency one minute withstand voltage (rms) in KV | 35 | 75 |
| v | Power Frequency puncture kV (rms) voltage | 1.3 times the actual dry flashover voltage | |
| vi | Impulse withstand voltage kV (Peak) | 75 | 170 |
| vii | Visible discharge voltage kV (rms) | 9 | 27 |
| viii | Creepage distance in mm (minimum) | 320 | 580 |

The rated insulation level of the AB Switches shall not be lower than the values specified below:-

| Sl. No | Standard declared voltage KV/RMS | Rated Voltage of the AB Switches | Standard impulse with stand voltage (positive & negative polarity kV (Peak) | | One Minute power frequency withstand voltage kV (rms) | |
|--------|----------------------------------|----------------------------------|---|--------------------------|---|--------------------------|
| | | | Across the Isolating distance | To earth & between poles | Across the Isolating distance | To earth & between poles |
| i | 11KV | 12KV | 85KV | 75KV | 32KV | 28KV |
| ii | 33KV | 36KV | 195KV | 170KV | 80KV | 70KV |

4) TEMPERATURE RISE

The maximum temperature attained by any part of the equipment when in service at site under continuous full load conditions and exposed to the direct rays of Sun shall not exceed 45 degree above ambient.

5) MAIN CONTACTS

AB Switches shall have heavy duty self-aligning type contacts made of hard drawn electrolytic copper/brass. The various parts should be accordingly finished to ensure interchangeability of similar components. The moving contacts of the switch shall be made from hard drawn electrolytic copper brass. This contact shall have dimensions as per drawing attached so as to withstand safely the highest short-circuit currents and over voltage that may be encountered during service. The surface of the contact shall be rounded smooth and silver-plated. In nut shell the male and female contact assemblies shall ensure.

- a. Electro-dynamic withstands ability during short circuits without any risk of repulsion of contacts.
- b. Thermal withstands ability during short circuits.
- c. Constant contact pressure even when the lower parts of the insulator stacks are subjected to tensile stresses due to linear expansion of connected bus bar of flexible conductors either because of temperature variations or strong winds.
- d. Wiping action during closing and opening.
- e. Fault alignment assuring closing of the switch without minute adjustments.

6) CONNECTORS

The connectors shall be made of hard drawn electrolytic copper or brass suitable for Raccoon/Dog ACSR conductor for both 11KV & 33KV AB Switches. The connector should be 4 -bolt type.

7) OPERATING MECHANISM

All AB Switches shall have separate independent manual operation. They should be provided with ON/OFF indicators and padlocking arrangements for locking in both the end positions to avoid unintentional operation. The isolating distances should also be visible for the AB Switches.

The AB Switch will be supplied with following accessories:

| SI No | Item | Size of 11KV AB Switch | Size of 33KV AB Switch |
|-------|--|---------------------------------|-----------------------------------|
| i | Operating Rod (GI dia) ISI mark | Length 5.50 meter dia: 25MM | Length 5.50 mtrs dia: 40MM |
| ii | Phase coupling square rod (GI) ISI mark | Length 1800 mm Size 25x25 mm | Length 2700 mm Size 40 x 40 mm |
| iii | Hot dip galvanized Operating handle (GI) | 1 No. | 1 No. |

The AB Switches shall be capable to resist any chance of opening out when in closed position. The operating Mechanism should be of robust constructions, easy to operate by single person and to be located conveniently for local operation in the switchyard. The GI pipe shall conform to ('B' class or Medium class Blue strip) ISS: 1239-68 and ISI marked by embossing. The vertical down rod should be provided with adequate joint in the mid-section to avoid bending or buckling. Additional leverage should be provided to maintain mechanical force with minimum efforts.

All iron parts should be hot dip galvanized as per IS 4759-1979 and zinc coating shall not be less than 610 gm/sq. meter. All brass parts should be silver plated and all nuts and bolts should be hot dip galvanized.

8) ARCING HORNS

It shall be simple and replaceable type. They should be capable of interrupting line-charging current. They shall be of first make and after break type.

9) BUSH

The design and construction of bush shall embody all the features required to withstand climatic conditions specified so as to ensure dependable and effective operations specified even after long periods of inaction of these Air Break Switches. They shall be made from highly polished Bronze metal with adequate provision for periodic lubrication through nipples and vent.

10) DESIGN, MATERIALS AND WORKMANSHIP

All materials used in the construction of the equipment shall be of the appropriate class, well finished and of approved design and material. All similar parts should be accurately finished and interchangeable.

Special attention shall be paid to tropical treatment to all the equipment, as it will be subjected during service to extremely severe exposure to atmospheric moisture and to long period of high ambient temperature. All current carrying parts shall be of non-ferrous metal or alloys and shall be designed to limit sharp points/edges and similar sharp faces.

The firm should have the following type test certificate. The type test should be from CPRI or equivalent lab:-

1. Test to prove capability of rated peak short circuit current and the rated short time current.
The rated short time current should correspond to minimum of 10K Amp and the peak short circuit current should correspond to minimum of 25K Amps.
2. Lightning impulse voltage test with positive & negative polarity.
3. Power Frequency voltage dry test and wet test
4. Temperature rise test
5. Mill volt drop tests

The above tests should be performed on the AB Switches, manufactured as per owner approved drawing with the specification. Along with the type test certificate, the certified copy of the drawing (from the testing lab) should also be kept for inspection of our officer. Also the test certificates should not be older than 5 years from the date of opening of tender.

Dimension of 11 & 33KV AB Switches in (Max.)Tolerance 5%.

| Sl. | Particulars | 11KV AB Switch | 33KV AB Switch |
|-----|-------------------------------------|----------------|----------------|
| i | MS Channel | 450x75x40 | 675x100x50 |
| ii | Creepage distance of Post Insulator | 320mm (Min) | 580mm (Min) |
| iii | Highest of Port shell | 254 mm | 368 mm |
| iv | Fixed contact assembly | | |
| | i) Base | 165x36x8 | 165x36x8 |
| | ii) Contact | 70x30x6 | 70x30x6 |
| | iii) GI cover | 110x44 | 140x44 |
| | v) Spring | 6 Nos. | 6 Nos. |

11) Moving Contact Assembly

| | | | |
|-----|----------------------|--------------|--------------|
| i | Base Assembly | 135x25x8 | 170x40x8 |
| ii | Moving | 180x25x9 | 290x25x14 |
| iii | Bush | Bronze Metal | Bronze Metal |
| iv | Thickness of Grooves | 7 | 11 |

12) Connectors

| | | | |
|---|-----------|-----------------------------|-----------------------------|
| i | Connector | 60x50x8 (Moving & fix both) | 60x50x8 (Moving & fix both) |
|---|-----------|-----------------------------|-----------------------------|

The bidder should provide AB Switches with terminal connectors, set of insulators, mechanical inter works and arcing horns sets. The base channel for the mounting of AB Switches shall also be included in the scope of AB Switches. The operating mechanisms together with down pipe operating handle etc. are also included in the scope of supply.